THE DENTAL DIGEST

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TUBERCULOSIS OF THE OROPHARYNX *

BY WILLIAM H. DEFORD, D.D.S., M.D.,
DES MOINES, IOWA

(*Concluded*)

THE eminent Italian anatomist Morgagni recognized tuberculosis of the buccal mucosa some three hundred years ago, but prior to 1885 only 90 cases had been reported. It is hardly believable that this condition is so rare. I am of the opinion that many, many cases have been overlooked all these years or mistaken for some other lesion, just as thousands and thousands of patients succumbed to "inflammation of the bowels" before appendicitis was demonstrated.

While the dental surgeon may not be called upon frequently to employ therapeutic measures to eradicate tubercular lesions, from the position he occupies as custodian of the oral cavity, he is preëminently a most important factor in stamping out tuberculosis, by means of prophylaxis. No greater truth was ever uttered than that "an ounce of prevention is better than a pound of cure."

It has been shown that filthy mouths literally swarm with tubercular bacilli, and these swept into the stomach, pass into the intestines and speedily enter the circulation, and are deposited throughout the entire body.

It has been shown that carious teeth harbor tubercular bacilli, af-

* This article was commenced in the September issue.

fording the requisite amount of protection, heat, moisture and food for their propagation, and that these may find lodgment in the lung by way of the tonsil, tooth sockets, and cervical lymph glands, as well as via the digestive tract.

It has been shown that pyorrhea pockets, the folds of the cheek, the spaces between the cheeks and gum, and the uncleansed pouches formed by the buccinator muscles, teem with tubercular bacilli, which momentarily swim out in the saliva in the act of swallowing.

It has been shown that sharp edges of carious cavities, irregularities of salivary calculi, and projecting margins of unextracted tooth roots, wounding the tongue, lips, cheeks and gum, have provided excoriated surfaces for the lodgment of the bacilli of tuberculosis.

It has been shown that the tonsils not only multiply tubercle bacilli, throwing them out into the mouth during the act of deglutition, but that they suck up into their crypts the adjacent bacteria of the oropharynx.*

The dental surgeon has it in his power, not only to correct the conditions mentioned, but secondarily, he is so situated as to become an inestimable factor in aiding the rhinologist and pharyngologist in stamping out tuberculosis. The rubber dam is so universally used by dental surgeons, that a patient rarely escapes without having it adjusted. When the rubber dam is in position, and the patient shows evidence of impaired breathing, there is present one or more obstructions in the nares or pharynx. In all probability the patient is ignorant of this condition, and might not find it out for a period of years. This is the time to press the truth home and advise consulting a nose and throat specialist. In all probability there is present hypertrophied turbinated bones, nasal polypi, deviated septum, a spur of bone or cartilage, adenoid vegetations in the pharynx impinging upon the posterior nares, enlarged tonsils, elongated or enlarged uvula—one or more of these conditions—all of which form favorable locations for the growth and transference of tubercle bacilli.

How important it is that the oral mucosa be kept in a state of perfect health! It should not be impinged upon or wounded by salivary calculi, diseased tooth roots, mal-fitting crowns and filthy germ-covered artificial dentures. Even when caries is not present, if the teeth are not normally shaped, and permit food to pass forcibly between them, wounding and destroying the gum septum, the contact points should by all means be restored.

* It has been shown that the tubercle bacilli gain entrance via root canals of teeth, sockets of extracted teeth, and the alveolar process, make their way into the superficial cervical lymph glands, thence to the deep cervical glands, on to the lymph glands of the thorax.

Orthodontia appliances should be so constructed that they do not press or rest upon the mucosa, and after the retaining appliances are in place, frequent visits should be made to see that they have not slipped or sprung, and that the little patient is keeping them clean.

Every carious cavity in the teeth should be filled, every rough surface made smooth, and there should be no abrasion of the oral mucosa. Especially should this condition be maintained in all patients who are free from tuberculosis lest they harbor tubercular germs; likewise in patients who have pulmonary tuberculosis lest the ever-present tuberculous sputum might form a focus of local infection.

From the patients' viewpoint it is important that the dental surgeon have a clean aseptic oral cavity, free from filth and germs. Patients think of this much oftener and lay more stress on this condition than is generally supposed by the dental surgeon. We often criticise our ministers, and loudly proclaim that they do not live what they preach. If a committee were appointed to examine our mouths, immediately after most eloquently discoursing to a patient on the advisability of and advantages accruing from having the mouth and gums rendered healthy, would the condition of our oral cavity convince any one that we came any nearer practising what we preach than does the minister of the gospel? Many dental surgeons make it a point to wash their hands in the very presence of their patients, or near enough so that they can actually hear that they are so doing. This is commendable, and one might go a step further, and rinse the mouth to good advantage, after working an hour or two over one or more unkept buccal cavities.

The dental office should be flooded with sunshine. This cannot be admitted, of course, through the window opposite the operating chair, but there should be other windows for this purpose. One, or still better, two windows should be lowered all the time allowing an abundance of fresh air, without making a draft for either patient or operator. Air thoroughly the operating room, between patients, while cleansing the hands and mouth. Quit the habit of throwing dressings and pellets of cotton, used as swabs, on the floor. Put individual paper drinking glasses for each patient. The fewer carpets, pillows, curtains, and draperies, the better. A hardwood floor with a small rubber rug is excellent for the operating room. This kind of a floor can be mopped every night, and between patients when advisable. See that the office is aired and cleaned as soon as possible after closing for the day, and that all cuspidors and débris are quickly removed, and not left over night. Make away quickly with the blood expectoration accumulating while extracting, and do not leave pus-covered roots and teeth uncovered about the office. Do not throw these in a drawer or box, but place

them in a corked bottle, if valuable enough to save, in an antiseptic solution. Do not leave blood, saliva, or vomit soaked towels and napkins spread out on chairs all night to dry. Never use the same piece of rubber dam the second time, even for the same patient. Never use a piece of rubber dam for a patient without washing it in an antiseptic solution, because you never know how many tuberculous or syphilitic people have handled it before it was brought to your office. Free the room of flies and mosquitoes. Keep your telephone receiver clean. Your microscope will show that it is alive with many varieties of bacteria, and dried exhalations of all kinds of diseases.

When operating for the tuberculous, be careful that no instrument be slipped back in its place in the cabinet or operating table without carefully boiling the same not less than five minutes, and while warm, rub the same good and hard with a clean napkin moist with absolute alcohol. These instruments should be cleansed prior to boiling and all mucus and débris removed in advance.

With proper care of the person, and all instruments used, and a careful inspection of the office and furniture, instruments and appliances, the dental surgeon should neither contract nor impart tuberculosis while operating, but slovenliness on his part, and careless handling of tuberculous patients, might be the means of imparting or contracting tuberculosis.

609 Walnut St.

DR. C. T. STOCKWELL

Dr. C. T. Stockwell of Springfield, Mass., died suddenly, October 25th, 1911.

Dr. Stockwell's death calls for more than a passing notice, as he was the discoverer of the germ theory of dental caries. The promulgation of the germ theory, which quickly gave Dr. Stockwell fame, was made in a paper read by him in October, 1882, before the New England Dental Society in Boston, on the subject, "The Etiology of Dental Caries, Acids or Germs—Which?" This paper was read later before the Connecticut Valley Dental Society and published in the *New England Journal* of November, 1882.

Dr. Stockwell was not only the discoverer of the germ theory in dentistry, but a talented writer on other subjects.

LOCAL ANALGESIA IN EXTRACTING

By J. Neales, D.D.S., Providence, R. I.

This is a most interesting method. Wouldn't the application of a drop of campho-phenique, or of a cocaine solution to the edge of the peridental membrane, dull the pain of the first insertion of the needle? —Editor.

The following method of using the hypodermic syringe in preparation for extraction has made the difference between success and failure for the writer, and if there are other dentists who are trying to get results by injecting the gum, as I did for years, and thinking that they are doing all in their power for their patients, they will, I think, be agreeably surprised at the results obtained in this way.

In the first place I use an all metal syringe which, when not in use, is kept hanging in a formaldehyde and borax solution in a wide-mouthed bottle. Having filled the syringe it is warmed thoroughly over the bracket, then the needle is introduced between the alveolar wall and the tooth just far enough to permit of the injection of a drop or two of the anesthetic when a pause is made. There should be no pain inflicted after this point has been reached. The needle may now be inserted its full length into the alveolar-dental space, steady pressure being exerted on the plunger as the point enters and considerable force being used in the injecting. This is repeated as often as is necessary, generally three or four times for a tooth.

It would perhaps seem as if there were danger in this method, of breaking the needle, but in over two years of using the procedure, I have never yet met with that accident. I always wait for at least a minute after making the application before extracting; in this time I warm my forceps over the flame. In this way only have I been able to extract teeth painlessly without resorting to a general anesthetic.

106 Broad Street.

A GOOD NEW YEAR'S RESOLUTION

That my mouth may be clean, pure and wholesome and that nothing but pure words and thoughts may emanate therefrom.

That my breath may be as pure and sweet as the flowers in Springtime.

Resolved, That I will be careful and diligent to cleanse my mouth and teeth, three times each day, earnestly endeavoring to keep the door of my system in a sanitary condition.—Dr. A. B. Carter, Houston, Texas.

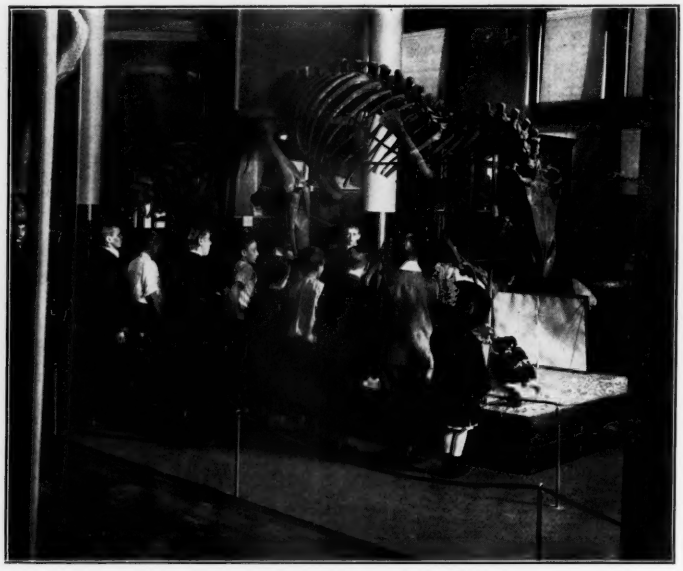
SCHOOL CHILDREN BEING INSTRUCTED ON THE FINE POINTS OF A DINOSAUR AND MOSQUITO AT THE AMERICAN MUSEUM OF NATURAL HISTORY, NEW YORK CITY

By Thomas M. Weed, D.D.S.,

New York City

A dentist has asked us where in this broad land of ours there is a museum, school or other place where our children are instructed by teachers on the teeth and the results of losing them, with good models.

Will we answer him that the home life of a dinosaur is more necessary to the child as he grows up than what happens to the articulation of his teeth when a molar is extracted?



The children have favorite exhibits. (Published by courtesy of the *American Museum Journal*, New York City.)

We don't believe that the dentists of this country are going to continue letting an animal that has been extinct some thousands of years continue to get more attention in the schools than the oral cavity, and

we ask our readers for suggestions on the best way to get the School Boards in the towns and cities interested, and how specimens that bring out the strong points should be prepared and presented.

464 West 145th Street.

Pupils from the High School of Commerce before the malarial mosquito exhibit. In a museum the visitor may seek out that subject in which he is most interested and thus lay a foundation for a life work or recreation.

Classes from the High School of Commerce visit the Museum not only for the subject matter of the exhibit but also for a study of methods, the work of glass blower, clay and wax modeler and of other craftsmen in the preparation laboratories.—(Published by the courtesy of the *American Museum Journal,* New York City.)

TEETH NOT A LUXURY.

False teeth are a necessity, not a luxury, and a husband is legally bound to furnish them for his wife, if she needs them. This is not the opinion of a medical or humane society, but the solemn verdict of the supreme court of Wisconsin. Unless an appeal is taken to the United States supreme court, on the ground that this decision deprives the husband of life, liberty or property without due process of law and therefore unconstitutionally, this pronouncement will stand as the law of the land. The *Journal of the American Medical Association* says that it is doubtful if there is any other State which has thus safeguarded the rights of its feminine citizens. Married women in need of teeth should at once move to Wisconsin.—*Exchange.*

SURGICAL AND MEDICAL TREATMENT OF ALVEOLAR PYORRHEA

By Robin Adair, B.S., M.D., D.D.S., Professor Prophylaxis and Pyorrhea, Southern Dental College; Oral Surgeon to Grady Hospital.

In looking over the multitude of papers on Pyorrhea, one is surprised at the absence of any practical description of the surgical procedure necessary.

Convention Clinics cannot furnish the complete technique, and the practitioner is left to work out his own individual methods. This has been the case with the writer, and his method is herewith given in detail with the hope of bringing out some interesting discussion.

This treatise omits all discussion of the etiology of this disease, as well as the symptoms and treatment of those incipient cases, with which every dentist is more or less familiar.

The operation here described is for the more advanced cases where teeth are loose with deep pockets extending down the side of the teeth; a rotten, cheesy, disintegrated alveolus, gums swollen and having little adherence to the surrounding structures.

An efficient armamentarium consists of seven instruments known as the Adair selection from the Younger and Smith sets. This set has proved efficient for the general run of cases.

Begin operating at some point where the disease has not progressed far, so as to get the patient under control. Each selected section is successively dried, and an aseptic solution of cocaine (five per cent.) is applied on pellets of cotton to gums, and with syringe into the pockets.

First, use the small curved scaler, removing the large pieces of deposit. Go around all surfaces of each tooth, being careful not to wound that part of the tissue where the peridental membrane is intact. In order to accomplish perfect work, a compressed air syringe and small electric mouth mirror are of the greatest advantage. These instruments are used in such a way that the air will dry and distend the gum away from the tooth, and the reflection of the mirror will enable the operator to see and remove with certainty the smaller deposits. One sure thing about the use of air, is that the slight particles of deposit show up when dry and are easily removed.

The curved instruments are used between the teeth and where there are pockets. These instruments can be used both as push and pull movement, and being small and smooth on the back of point, enter the pockets without irritation to gum tissue.

The operator should satisfy himself that the roots of the teeth are surgically clean. Next direct attention to any disintegrated bone, which feels soft and gritty, even under the touch of the small probe. A delicate sense of feeling tells when healthy alveolus has been reached.

All sharp and thin edges of bone are rounded off so that the soft tissue or gum will festoon over the surface operated on without any irritating point of projecting bone. Adair's bone curette is used for this purpose. Often it is necessary to use the engine and suitable shank surgical burs to smooth the edges of the process.

After the above has been accomplished, it may be necessary to amputate the roots of some of the posterior teeth. The nerve should be removed with cocaine and the canals filled with gutta-percha. Use a new cross-cut fissure bur to separate the root. Inclined plane toward the crown of the tooth makes conditions self-cleansing. Now go over the field of operation with the Smith file instruments. These files insure a smooth surface and remove any remaining tartar. When finished, the pockets are thoroughly irrigated with a warm solution of AA Dental Mouth Wash to wash out all the débris. Very loose teeth are now ligated and bad occlusion corrected.

Don't enter the pockets again unless after several days a massaged gum will show pus at gum margin. This massage should be frequently done, both for its beneficial effect and to show up any point of failure in surgical work.

The operation should be performed under the same aseptic precautions as used in surgical operation, and if the work be thoroughly done, one has a fresh wound filled with a blood-clot, which soon organizes and forms new tissue. The operation should be done quietly, without any great strain on the patient, and with practically no pain. If the operator is careful not to mutilate the gum tissue at the cervical border, you could hardly tell after the operation that extensive curetting had been done below the surface.

MEDICAL TREATMENT

No medical treatment known will relieve these conditions unless the surgical procedure is well done. Yet the medical treatment is just as great an adjunct to the surgical work.

For years the Dental Profession have endeavored to find some way to prevent the accumulations of the mouth from entering the pockets after operation. Some have tried sponge grafting, some tying strips of rubber down about the teeth, still others by packing the pockets with strong irritating drugs.

This paper presents the application of two preparations, which seem to fulfill this demand and have worked wonders in our office. Many dentists have written that they could not get their druggists to properly compound the prescriptions; while others do not wish to take the time to make them. We have arranged for the Atlanta Antiseptic Company to prepare these prescriptions, or they may be had from any dental supply company. The formulæ have been fully published—are non-secret. The composition appears on each bottle.

DRESSING THE MOUTH.

The mouth is dressed immediately after the operation with the above medical preparations, known as AA Pyorrhea Treatment, No. 1 and No. 2.

The application is greatly simplified by the use of small doilies which can be thrown away. These are inexpensive and used in all treatments about the mouth. Buy from your dry goods store a bolt of English Long Cloth, costing about $1.00. Mark off the top of bolt into squares about 3 x 5 inches, some longer, some smaller. Your printer will, with a few strokes of his cutter, convert the bolt into several thousand doilies. These can be rendered sterile in the formaldehyde sterilizer.

The applicator recommended is made by dipping the end of wood toothpicks into Sandarac Varnish, and twisting a few strands of dry cotton about the end, these making a secure and convenient swab to paint the gums with. Several hundred of these can be made in a few moments for future treatment by your assistant, to be thrown away as used.

The mouth is dressed by drying sections of the gums with the aseptic napkins, which should be held so as to protect the lips and cheek while applying with tooth pick, a coating of No. 1 Pyorrhea Treatment, giving a moment for absorption; then freely paint over No. 1 with No. 2, letting it flow around and between the teeth. When the napkin is removed and the saliva comes in contact with the medicated gum, the combination of these two preparations forms a membranous coating or dressing similar to that produced by collodion as used by surgeons.*

As each section is treated, have patient rinse the mouth with AA Dental Mouth Wash diluted three times. This at once removes the

* This is a topical dressing. Pockets should not be injected. I have recently shown this combination to quite a number of prominent dentists and all agree that the combination is great, but are unable to explain the formation of the coating.

disagreeable taste and puckering of the Pyorrhea Treatment. The lips and cheeks should be held away with cotton or napkin while another section is dried and treated in the same way until all the affected teeth and gums are *sealed.* It is better to treat the upper jaw first. It is not necessary to have dressing extend more than 1-4 inch from gum margin. Be careful not to seal the ducts of Wharton and Steno (Stensens), as this would cause a disagreeable swelling of the glands. The benefits of the iodine contained therein we all know. The inflammation is deep-seated, and iodine is the one agent that will penetrate. The astringent feature is produced by the tannin. This dressing unites the gums to the teeth, and food, saliva, and toxic products are thus excluded. The blood-clot in the pockets is protected until organized into new tissue. This dressing is not to be removed for 24 hours. See the patient regularly every day. The membranous or leathery coating of the previous treatment is removed from the gums by a gentle massage with a soft tooth-brush, moistened in hot water; the mouth is sprayed with AA Mouth Wash, and the dressing of No. 1 and 2 is again applied. After a week of treatment it is not always necessary to use the No. 1 as the aseptic condition is under control, and the subsequent applications may be of the No. 2 alone. Sometimes, when an excess of these preparations is used on the gums, blisters similar to the so-called "fever blisters" appear in the mouth; we have been unable to explain this symptom. When this condition arises, suspend all applications for a few days, until the condition disappears. The Mouth Wash should be constantly used by the patient, until resuming the application of regular treatment.

CONSTITUTIONAL TREATMENT

It is a simple academic proposition that no constitutional treatment alone will cure Pyorrhea; but it is well to always advise the patient to keep bowels well open with magnesium sulphate during the treatment, and to drink large quantities of water each day. In this way the entire system is flushed, and any poisons present washed out.

THE PART PLAYED BY ORAL HYGIENE

The dentist should provide his patient with the proper kind of tooth-brush, which is to remain in the office, and be used each day, as a regular part of his technique in treatment. Do the brushing yourself for two weeks, having patient hold a hand mirror to acquire a proper idea of using the brush. The remainder of the time the patient is com-

pelled to acquire a perfect technique of brushing, which has all to do with the permanency of the operation and treatment. If the patient comes back in the future, with a septic mouth, he has only himself to blame.

After treating the patient in this manner for from two to four weeks until satisfied that new tissue is formed which is hard enough to resist the force of mastication, spend several hours in cleaning and polishing the teeth. The treatment will not permanently stain the teeth, but it will stain black every bit of foreign matter on the teeth. After a week's treatment, the operator is sometimes astonished to find so much tartar has escaped his instrumentation, so much is shown up by the staining process. Every bit of the stained accumulation must be removed by scalers and pumice with polishing wheels and Darby's polishing points. These preparations have been criticised by some dentists on account of the staining quality, but in reality this feature in the hands of a careful operator gives him the greatest guide for the time spent in polishing teeth, and the proper instruction of patient in the proper hygiene of the mouth, and will crown the effort with success.

THE MOUTH WASH AND THE DENTIFRICE RECOMMENDED

are made under our supervision. The composition of the AA Dentifrice Cream is Creta praecip., magn., carb., sod. borat., potass. chlorat., sapo Span., ac. croll., menthol, glycerine. That of the AA Mouth Wash is Potass. chlorat., sod. benzoat., sod. borat., formaldehyde, gaultheria, glycerine, menthol, thymol and tannin.

When Pyorrhea patients are dismissed it is only on trial and they should be urged to return for Prophylaxis treatment. Then you can see if they have carried out your instructions as to tooth-brush, floss silk, and their use. This keeps up the patients' interest in their teeth, and the results are gratifying to both patient and dentist.

THINGS TO FORGET.

If you see a tall fellow ahead of a crowd,
A leader of men; marching fearless and proud,
And you know of a tale whose mere telling aloud
Would cause his proud head to in anguish be bowed,
It's a pretty good plan to forget it.

If you know of a skeleton hidden away
In a closet, and guarded, and kept from the day
In the dark; and whose showing, whose sudden display
Would cause grief and sorrow and life-long dismay,
It's a pretty good plan to forget it.

If you know of a thing that will darken the joy
Of a man or a woman, a girl or a boy,
That will wipe out a smile, or the least way annoy
A fellow, or caused any gladness to cloy,
It's a pretty good plan to forget it.

—Anonymous, "*A Healthy Home.*"

CIVIL REQUIREMENTS FOR ALIENS TO PRACTISE DENTISTRY IN FOREIGN LANDS

By Henry Lovejoy Ambler, M.S., D.D.S., M.D., D. Hist.
Cleveland, Ohio

Madeira.

The island of Madeira is a province of Portugal, and no one can practise dentistry there without passing an examination in the medical school of Lisbon, Coimbra or Oporto.

The main city is Fuenchal, with about 50,000 population, and the only dentist is Ageoedo Ramos, who took his D.D.S. in Chicago; his office is in the third story of a good building in the busy part of the city.

Gibraltar.

Gibraltar is owned by the English, and their law provides that only the Licentiate in Dental Surgery can be registered and call himself a dentist and collect fees by law, but a man can practise legally if he is not registered. To obtain registration it is necessary to pass an examination equal to one for admittance to many universities in the United States, but even after the candidate has passed, he must spend two years on the dental curriculum, in a dental and general hospital, and then pass a final professional examination.

Naples.

Naples has no American dentist.

If an alien wishes to practise dentistry in Italy, he must pass an examination and obtain the degree of M.D. from one of the Royal Universities, but it is permissible for foreign dentists to practise among visitors and foreign colonies.

Dr. Guerini told the writer that a special commission had been appointed to draft a dental law.

Cairo, Egypt.

In order for an alien to obtain a permit to practise in Cairo, he must go to the American consul there and identify himself and show him his dental diploma; if it is from a reputable college, the consul will give him a written recommendation to the head of the Sanitary Department, Dr. W. P. S. Graham, an Englishman, and present his letter and diploma, and if everything is satisfactory he will grant him a license to practise.

India.

In India anybody can practise dentistry (or try to), as there is no law, college, society or journal.

If an alien dental graduate wishes to practise there, in some places he will be required to pay a small municipal tax.

Bombay, 800,000 population, has three American dentists.

Agra, 180,000 population, has no American dentist.

Calcutta, 900,000 population, has five American dentists.

Rangoon-Burma, 325,000 population, has four American dentists.

The island of Ceylon is a British Colony, and Colombo is the main city, with 150,000 population and has two American dentists.

The only law regarding dentistry provides, " that dentists must not administer anesthetics."

Kandy, island of Ceylon, 11,000 population, has one American dentist.

Singapore is an island owned by the British, and has 300,000 population with two American dentists who subscribe for THE DENTAL DIGEST.

There is no special dental law or ordinance to prevent any one from practising, but they claim they are going to try to pass a dental law.

The island of Java, south of the Equator, is a Dutch colony, the chief city is Batavia with 112,000 population, and has seven good dentists, among them Dr. Van Hasselt, Chicago College Dental Surgery, 1900.

There is a Board of Dental Examiners here, composed of three M.D.'s, and Dr. Van Hasselt, who holds examinations in theory and practice and grants certificates; but this only permits them to practise in Java. Graduates of reputable dental colleges in the United States or Europe must pass the Board. Probably it would be better for Americans to go to Holland and pass the board; that would entitle them to practise anywhere that the Dutch have control.

Labunan, in British North Borneo, has about 1500 population, mostly Chinese and Malaysians, but no dentist, and there are no laws or ordinances to prevent any one from practising. The writer believes that he is the first dentist to take pictures and make examinations of the teeth, of the " Head-hunters."

Manila has a population of 225,000, including ten American dentists.

The dental law enacted Jan. 10, 1903, provides in part: That the commissioner of public health for the Philippine Islands shall appoint a Board of Dental Examiners, with the consent of the Board of Health of the Philippine Islands, consisting of three reputable dentists who are graduates from dental colleges recognized by the National Association of Dental Faculties, and the National Association of Dental Examiners of the United States; the Board shall issue a certificate to each one who

furnishes a diploma from a legal dental college, and in addition passes an examination before the Board.

The law does not apply to artisans engaged in the mechanical construction of artificial dentures or other oral devices, nor to physicians and surgeons in legitimate practice. The Board can refuse to issue certificates, and also revoke them for good cause.

H. C. Strong, President of Board.

In China the writer did not find any ordinances or laws controlling the practice of dentistry anywhere by anybody, but if you are going there, be wise and carry with you a diploma from a reputable dental college.

Canton, population 2,000,000, had no American dentist.

Victoria, the main city of Hongkong, is owned by the English and has 325,000 population, five American dentists and thirty Chinese, and as there is no dental law or fee bill, any one can practise—or try.

In Japan the first dental law was passed Oct. 23, 1883, and on Feb. 5, 1898, there were some changes and additions made in: Rules relating to the supervision of Makers of Artificial Dentures, Tooth Extractors and Bone Setters.

On May 1, 1906, the following was enacted:

The candidate for practising dentistry must secure a license from the Minister of the Interior Department of the Japanese government, and they must possess one of the following qualifications:

(a) The candidate must have been graduated from a dental school recognized by the Minister of Education.

(b) Those who passed the examination before the Dental Board of the Educational Department of the Government.

(c) Those who have been graduated from recognized dental schools in foreign countries or possess a license to practise in foreign countries.

Second. The following persons cannot obtain a dental license:

(a) One who has received a heavy criminal sentence.

(b) One whom the court has declared a financial bankrupt.

(c) Under twenty years of age—deaf, dumb, blind.

Third. The license may or may not be granted to those persons guilty of medical malpractice.

Fourth. In the Interior Department there shall be a book for dental licenses.

Fifth. Dentists are not allowed to give a patient a prescription or drugs without diagnosing.

Sixth. Dentists must have a record book and keep the name, age, address, business, name of disease, and their treatment and drugs used. This record must be preserved for ten years.

Seventh. Dentists are not allowed to advertise anything false, or use any words to make their ability look great, or to mention that they have any secret method or treatment.

Eighth. Dentists may organize a Dental Association.

(The Minister of the Interior prescribes the rules for the Association as it is a legal body. The Dental Society of Japan—for business purposes. The society has about ten branches.)

Ninth. The Dental Association can offer a petition or make answers to the government's questions concerning medical prophylaxis in dentistry.

(This means that the dentist has a right to say what constitutes prophylaxis.)

Tenth. If any dentist is against Act 2 (a), (c), his license shall be taken away from him.

If a dentist commits a criminal offense he shall be arrested or prevented from practising for a certain length of time.

Eleventh. If any person practises dentistry without a government license, or offends against Nos. 5, 6 or 7, he shall be fined not more than $50.00.

It would be well for an applicant to have his diploma translated into Japanese, and also any other papers relating to his nationality and record in the place where he came from. He must thoroughly identify himself, then he need not expect an examination.

Hawaii.

On April 25, 1903, the territory of Hawaii enacted the following dental law which provides (in part) viz: Licensed physicians and surgeons may extract teeth and perform surgical operations.

The Board of Dental Examiners (3) shall be appointed by the governor and consists of dentists recommended by the Hawaiian Dental Association.

In order to enter practice one must have been graduated from a reputable dental college, and also pass an examination before the Board, which for sufficient reasons can revoke a license.

Dental operations shall not be performed by an unlicensed person under cover of the name of a licensed dentist.

As we understand it, the law does not provide for artisans doing "Mechanical Work" or extracting teeth.

Honolulu has nineteen *American Dentists, and all but one are graduates, and nearly all belong to the Dental Association,* and some of them subscribe for the DIGEST.

This completes the cruise around the world, but the following places which have been mentioned, were visited on a former cruise.

The island of Malta belongs to the English, and no one can practise dentistry there without a license from the government.

In order to practise dentistry in Athens, every one must pass an oral examination before the Dental Board, and obtain a license from the Secretary of the Sanitary Department. Diplomas are presented to the Minister of Public Instruction, who affixes a fee stamp; after this a small yearly tax is due.

If a foreigner wishes to practise in Constantinople, he must apply to the resident consul from his country and present his diploma or whatever documents he may have showing his right to practise where he came from; then the consul will see the Turkish government, which after some delay, grants to the applicant, through his consul, a permit to practise.

It is understood that the applicant must pass a short examination before the Board of the Imperial Medical School, and that he must obtain their certificate before the government will grant him a license, as this school claims to teach some dentistry.

Smyrna is the chief city of Asia Minor, and has 225,000 population. Here we met N. D. Nicholaidis, who is a native but was graduated from the Philadelphia Dental College. If there are any dental laws, judging from what we saw and heard, they must be inoperative.

Caifa, Syria, 12,000 population, including two dentists.

A graduate of a reputable dental college in the United States is permitted to practise after obtaining a license from Constantinople, as already referred to.

Jerusalem, Palestine, has no graduate American dentist, and there is no law to prevent any one from opening an office, but if a foreign dentist is going there to locate, it is better for him to apply to the resident consul of his country, and request him to confer with the government officials in Constantinople and obtain permission for him to practise. Mr. Wallace, the American consul, told us:

That nobody especially cared who practised, and if anybody wanted to, they could demand that the dentist show his diploma or license, and he thought a license from the dentists' home State Board made a better impression on the government than a diploma.

Rome, the " Eternal City," has 464,000 population, including fifty dentists, among them four Americans. For dental law refer back to Naples.

For details about any of above places, see " Around the World Dentistry," published by the writer of the above article.

428 Rose Bldg.

DENTAL INSPECTION IN BOONEVILLE, IND.

Editor DENTAL DIGEST:

I am sending you a report of dental inspection in the Booneville grade schools.

This report represents one-half of our grades 1st to 8th.

I have been with many others in the past two or three years advocating this work, and of course, just like others who have taken up the fight, I have had some knockers. I would urge you all to take up the fight and get into your schools as soon as possible, for every school in the land needs this work, and you will be praised for your work after the results begin to show. With the aid of the medical profession we have instituted medical and dental inspection, and below you can see results of our examination:

Grade.	No Exam.	Toothbrush.	No Toothbrush.	Family Toothbrush.	No Cavities.	Perfect Mouths.	Abscess.	Had Work Done.	Had No Work Done.
1st	78	21	51	9	345	14	1	6	72
2d	36	14	22	3	152	4	0	4	32
3d	38	13	25	2	149	5	1	4	34
4th	104	51	53	0	338	17	3	20	84
5th	38	22	16	2	88	8	0	6	32
6th	32	22	10	0	68	9	1	11	21
7th & 8th	38	31	7	0	81	9	0	14	24

F. W. TRAYLOR, D.D.S.

Editor DENTAL DIGEST:

DEAR SIR:

I am not a dentist—but I believe in dentistry. I was brought up on the theory of "clean your teeth and see your dentist" and I have profited thereby.

It is for this reason that I am writing you about an idea which recently occurred to me during the course of some dental work.

The operation required several visits to my dentist, of about an hour each, and at the end of each one I left his office with a very disagreeable taste in my mouth—a literal taste I mean. In preparing my unfortunate tooth for the final operation he made use of some antiseptic which had a most unpleasant taste. I do not doubt its efficiency or the necessity for its use, but in common with all other antiseptics its flavor was disagreeable.

I suppose this cannot be avoided or the manufacturers would long since have done so. But why could not the operator, as a final procedure each day, use some simple, good-flavored preparation, *merely to leave a pleasant taste?* I do not see how this would in any way interfere with the antiseptic treatment and it would certainly make the patient leave the office in a better frame of mind.

The dental cream which I am now using, taking my dentist's word for its goodness, would fill the bill perfectly. Or any other preparation that does not taste like a drug store.

This suggestion may seem worth while to you, in the hope of which I am writing it.

Yours truly, "J. D. B."

COMPLIMENTARY DINNER TO DR. WILLIAM WALLACE WALKER

A COMPLIMENTARY dinner will be tendered to Dr. William Wallace Walker on the evening of Saturday, January 20, 1912, at The Hotel Astor, New York City. The dinner is given by the First District Dental Society of New York.

Dr. Walker has devoted himself for many years to the advancement of the interests of this Society, and, in addition to inaugurating a very successful series of Post Graduate Study Sections, has also harmonized the conflicting society interests of the metropolis, by merging all the existing societies into the First District Dental Society which therefore now includes the New York Odontological Society, the New York Institute of Stomatology and the New York Institute of Dental Technique.

The Committee makes this public announcement because they fear that some of the many hundreds of friends of Dr. Walker throughout the country may accidentally fail to receive an invitation. All who desire to be present are therefore requested to waive formality and send their acceptance at once to the Treasurer, Dr. James W. Taylor, 106 East 57th St., New York, enclosing the subscription price—ten dollars.

SAFFORD G. PERRY, *Chairman.*
HENRY W. GILLETT, *Secretary.*

THE CHAPIN A. HARRIS MEMORIAL FUND

THE committee appointed by the Maryland State Dental Association in charge of the Chapin A. Harris Memorial Fund, calls your attention to the desire on the part of the Dental Profession to commemorate in a suitable manner their appreciation of the services rendered by this distinguished man in the effort to elevate the profession of dentistry.

While not a Marylander by birth, his life work was accomplished in this state, which was his home, and it was in the city of Baltimore that he established the first Dental School, thus making Dentistry a profession.

Connecticut has recognized and honored the name of Horace H. Hayden, a co-worker with Harris, by erecting a handsome monument to his memory at Windsor.

We are now asking contributions from Dental Societies, Colleges and members of the profession at large to aid in erecting a suitable monument to the memory of Chapin A. Harris, the founder of professional Dentistry.

Those wishing to contribute will kindly send to Dr. H. A. Wilson, Treasurer, Calvert Bank Bldg., Baltimore, Md., or to this Journal, in which the names of the contributors will be published.

Committee:

W. G. FOSTER, *Chairman,*

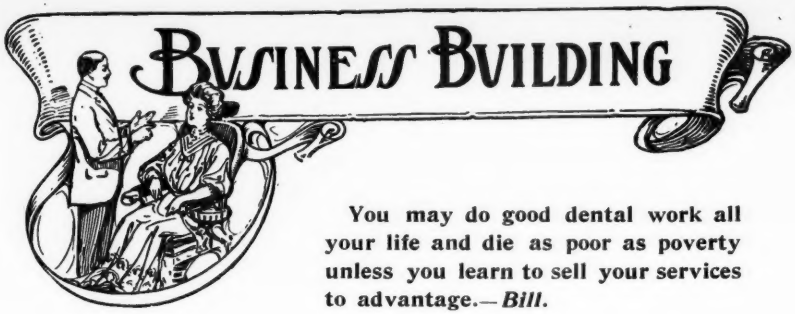
M. G. SYKES,	W. W. DUNBRACCO, *Sec't'y,*
B. HOLLY SMITH,	T. O. HEATWOLE,
H. A. WILSON, *Treas.*	J. W. SMITH.

UPPER LATERALS WANTED

I AM trying to get out a chart showing the formation of lateral roots at various points between apex and the gingiva. I need about 15 more upper lateral roots.

To every dentist who sends me one or more laterals, preferably with a fragment of the crown in place, I will send a beautiful halftone print, without printing, when the work is complete. This illustration will be worth having.

GEORGE WOOD CLAPP,
Editor DENTAL DIGEST.



You may do good dental work all your life and die as poor as poverty unless you learn to sell your services to advantage.—*Bill.*

SERVICE SELLING TALKS

NUMBER THREE

By W. F. Davis, D.M.D., New York City

One dull afternoon I sat in my office wondering if my idea of educating the public to a higher plane of dental knowledge and dental service was the correct idea. I say "educating the public" advisedly. I might have said "educating my patients", but the people I tried to educate were not always my patients. They were component parts of the great public. They came to me sometimes for advice, sometimes for service, sometimes merely as "shoppers". My ideas of the proper service often conflicted with theirs. Many times their idea was "the cheapest will answer". My idea was a plane above theirs. In the endeavor to raise them to my plane, some slipped entirely away from me. Would it not be better to give up the endeavor to educate? Would it not be easier to give people the services they asked for and not try to sell them better service? I am glad to say I didn't argue the point very long. I decided that I wasn't a dental slot machine into which anybody could insert two dollars and get just two dollars' worth of service. I started "service selling", as a duty I owed the public and myself and because I felt sure that it would eventually return big dividends. It has, almost from the first, paid me the big dividends, and it has enabled me to retain an independence of spirit worth much more than the few patients I have lost by it. Yea, more even than many shekels. I'll stand by my guns.

Enter Thomas Anderson and his son Sammy. This means a "service selling talk". I've had one talk with him. He left my office unconvinced, but that he came back is proof that the talk made an impression.—Author.

"Good afternoon, Mr. Anderson." "How are you, Sammy?" "Sit down. I'm glad you came in. One of my patients disappointed me and I have a little leisure time."

"Oh, I see, you came in to talk about Sammy's teeth. I was afraid I had scared you away by my long talk the other day. You've been investigating a little yourself? Good! I am glad you are interested.

Let's see what good my talk did. If I remember rightly, I told you that Sammy's teeth were so irregular that he could not close them so as to masticate his food thoroughly. I told you of some of the evils resulting from imperfect mastication, and I am sure I called some of these evils dangerous. Now, what did you find out?

It is only with great difficulty that he can close his lips over the front teeth.

"You are willing to admit that imperfect mastication is bad for Sammy and that he will not be strong and healthy till he can masticate properly? Sammy says he 'can't chew meat very well'?

"I am glad you have been thinking about these things and that you

believe that I am right. You were frightened at what I said about the dangers of mouth breathing?

"You think I must have been exaggerating, and have come in again to see if I was in real earnest? I am very glad you did, not so much on my account as on Sammy's. I wouldn't like to see him go through life carrying such a handicap as he is now under. I am sure I can convince you not only that I did not exaggerate, but that I didn't make the case nearly strong enough.

"To begin: Sammy's teeth have not grown into their proper places. They are so far outside the arch—the proper place for them—that it is only with great difficulty that he can close his lips over the front teeth. If the lips are not closed, the natural tendency is to breathe through the mouth.

"When you were here before you admitted that Sam had not been as rugged as he should, and you feared that he would not grow to be as healthy and strong a man as his father. Now I don't intend to alarm you about Sam's condition, but I want to tell you of some of the reasons which have to do with his lack of development. And every one of these comes directly back to his habit of breathing through his mouth.

"You've noticed that Sammy breathed through his mouth, but never thought much about it? Well, I want to show you how important correct breathing is and just why breathing through the mouth leads to very serious consequences.

"The mouth and the nose are the only natural openings by which anything gets into the body. They are the only paths for taking in food and air, and we know that they are about the only paths by which we take in the germs of some of the most dangerous of diseases, such as diphtheria, tuberculosis, pneumonia, and very possibly, scarlet fever and infantile paralysis.

"When nature planned this double entry way, she fitted one-half to admit food and drink, and the other half to admit air. She put at the entrance of the nose a strainer suited to protect the body from the dangers which might enter by that passage.

"Did you ever notice the hairs which grow just inside the opening of the nose? You've often wondered what they were hidden away in such a place for? They are the first strainer which nature has set to guard the body against dangers entering that way. They strain out many particles of dust and many dangerous germs and prevent their getting into the body at all. Nature expected us to breathe through the nose at its very entrance, and she put the sentinels necessary to protect the body.

"But if a child does not breathe through its nose, it must breathe

through its mouth. Then all the dust and irritating particles go directly into the throat. They irritate the back and sides of the throat and cause catarrh. And that leads to serious trouble, as I want to show you.

"Did you ever notice how many people begin to be hard of hearing during middle life?

"You're troubled that way yourself with one ear."

"You're troubled that way yourself with one ear and are only forty-nine years old?

"Do you know the cause?

"Well, I can tell you the most common cause, because I have had trouble from it myself. The most common cause of that trouble is breathing through the mouth, especially in childhood.

"How can that be?

"Very easily. The drum of each ear is like the head of the drum in a brass band. It must have air on both sides to work well. It gets air on the inner side by means of a little tube running from the side of the throat. As long as that tube is open, the ear is apt to stay healthy and keen. When it is closed by an irritation of its lining, the

If Sam is behind his proper place in school, it is probably because his eyes or ears, or both, are imperfect.

most hopeless form of deafness sets in. The membrane about the mouth of that little tube is irritated and often closed by the dust which strikes the back of the throat when one breathes through the mouth.

"Isn't that merely theory?

"No, indeed, it is not, at least with me. When I was a boy I breathed through my mouth until I was within a year of as old as Sam. About two years ago my ears troubled me. I went into my friend,

the nose and throat man, and he found that the membrane around the mouth of these little tubes running to the ears was chronically inflamed as the result of mouth breathing up to the time I was twelve years old. We found that the drums of the ears had thickened and become less sensitive to sounds. In other words, I was growing hard of hearing just as you say you are. My friend opened the tubes a number of times, got the air to circulating in the ear properly, and now my ears are well, though not as sensitive to sounds as they would have been but for this trouble. So it wasn't theory with me at all. It is plain practical knowledge, the result of experience. You may be sure I watch my little ones, so that they shall not breathe through their mouths.

"Is that going on with Sam now?

"Without a doubt. He may not feel the effects of it now, but he will in twenty-five years from now, just as you and I do now. And if he does not take care of it then, he will be hopelessly deaf before he is very old. It is said that three cases of deafness out of four begin in this way.

"Is it doing him harm now?

"I cannot answer that for him because I don't know him well enough, but if I could watch his school work for a while I could tell.

"What has his school work to do with it?

"A great deal more than most folks understand. In every school are certain scholars who are behind the others of the same age. They are called dull or backward. We used to think that there was something different in the brain of one that made him smart, and something lacking in the brain of the other made him dull. Now we know that there is generally very little difference in brains, but that there is a difference in the avenues that lead to those brains. The two great avenues are sight and hearing. The child with the good eyes sees everything that is done, and the good ears hear everything that is said; he is generally the bright child. And we find in a surprising number of cases that the other child is dull because it only partly sees or hears. If Sam is behind his proper place in school, it is probably because his eyes or ears, or both, are imperfect.

"Before I tell you any more, I want you to have time to think over what I've said. When you come to town next week, I'll tell you some of the reasons why Sam's shoulders are narrower than they should be, why his shoulders round over so and his shoulder blades stick out, why his chest is flat, why he is thin, rather than as robust as he should be, and why he is sallow rather than rosy and pink as you would like to see him."

BROWNSTONE DENTISTRY

"WHAT is the Matter with Dentistry To-day?" is the title of a paper written and read by Dr. H. B. Butler of Ogdensburg, N. Y. This paper has attracted much attention and comment. I have read the paper several times and according to my belief there are lots of things wrong. I think that one of the main reasons of their being wrong is the fact that the professional literature and college lectures are full of ideas of such men as Drs. Kirk, Litch, Guilford, Ottolingui, Jack, Thorpe and numerous others. Men of the profession, surely, but they are men who have been in practice from 25 to 50 years and have the best people in the country for their patients. They are men who for years have controlled colleges, have had a monopoly on text books and have especially monopolized the dental mazagines. Their writing don't give their views when they began their professional career, but what enormous things they now do and what high fees they now command.

It's easy to give advice and be independent with a fat pocket-book and people for patients who never count the cost, but it is different when the pocket is almost empty and the family and yourself need food and clothing. Then every possible dollar looks as big as the proverbial haystack and the independent spirit is an unknown quality.

A new dental graduate may aptly be compared to a young man who is truly in love with the girl he naturally thinks the sweetest in the world. They want to get married; he has a position at $15 to $25 per week. His ambitions are high and nothing is too good for his sweetheart. He goes to the owner of a big "Brownstone" home for suggestions as to what kind of furniture to buy and how to decorate his new home. He forgets, and so does our "Brownstone" friend, that it took him from 20 to 40 years to reach the present stage. The young couple need advice from a couple similarly situated but who have had a few years of experience. This is what the recent graduate needs and not advice from the "Brownstone" dentist.

What dental magazine except THE DENTAL DIGEST would ever print a paper or accept a suggestion from anybody but the "Brownstone" men? We all admire these men and their views and they all help, but they seldom give any advice that does a beginner any good. It is said that the first year of married life controls the rest, and I believe the same applies to dentistry. The secret of success is in getting started right.

I am one of those who have been out a few years and am making good after paying high for my experience. I feel gratified to know

that at last there is a dental magazine that is different from the rest, and it is doing wonders in making the profession see that there is also a business side to our profession and that it is just as important as the professional side. When I entered college I didn't know a wax spatula from a vulcanizer, either by name or sight. I noticed at the college the great advantage the student has who has had office experience before entering college. I was graduated in the usual three years and may state that I was honor man of my whole class for three years. I passed my State Board and opened up for myself. I soon discovered that I had lots to learn and knowledge of the ligaments of the patella or of chemical equations was not what was needed just now. Couldn't remember hearing a single lecture about what I now needed. Seemed to me the college had prepared me for the State Board examination and nothing more.

I was full of the porcelain idea and no gold crowns anterior to the second bicuspid. I talked porcelain, but it hadn't reached the country yet, and when I did a few they were generally sorry they didn't show like a nice gold filling. I was refusing anterior gold crowns, but every other dentist in town was making them. I eventually fell into line, but only when coaxed to do it. After a few more years of experience I have patients who are similar to the kind the college profession talked about and the "Brownstone" men wrote about. They wouldn't let me put an anterior gold crown on for any amount of money, but I missed a good many dollars in discovering the difference in people and their ideas of gold showing and otherwise. It reminds me of an experience of a fellow graduate who had been working for an uptown "Brownstone" dentist and was compelled to look for a similar job as the office was closed during the summer months. He found one in the poorer section of the city. His first patient was a lady with cavity in lateral and she wanted a gold filling in same. He prepared cavity from lingual side and when filling was finished it could hardly be seen. He handed the lady a mirror and remarked how he had put it in so it wouldn't show. She answered with a disgusted look, "What did you do that for?" and refused to pay the regular fee and was only satisfied when the dentist agreed to put a gold lateral on opposite side at a reduced figure. This happened in New York City. The East Side dentist had to do this to be successful and the West Side had to do the opposite. The college teaches only the West Side or "Brownstone" and never even hints that there is another kind, and the "Brownstone" men have monopolized colleges, college text books and dental magazines for so long that they themselves seem to believe there isn't any other kind. Naturally the student and recent graduate without office experience

doesn't know any difference until he finds out for himself. And that is generally an expensive way to get experience.

I remember many weary hours spent in lectures and at studies memorizing the chemical equations of about 50 elements and the fusing points of numerous metals and jaw-breaking names for every point on the bones and a thousand things we can immediately forget when we once pass the State Board. Never a word did we hear about where or how to locate, or what our time was really worth. We never got a single lecture on what we needed after passing the State Board. It's never too late to mend, and thanks to Dr. Clapp and THE DENTAL DIGEST a good many are now on the right track. But how much easier it would have been for a good many thousand dentists had this agitation been started about 25 years ago! A good many old, deserving dentists would have been saved from the poor house and would have enjoyed old age after a lifetime of usefulness instead of an impoverished and sad end.

A. H.

LOGIC

BY J. R. CALLAHAN, D.D.S.

IN order to maintain physical and mental energy for a number of years, one should be possessed of a fair share of good health. Life of any kind without health is a serious handicap in the struggle for success. This is especially true of the dentist, whose very soul is on trial every day. His sympathy, patience, tact and endurance are put to the test every hour that he is in contact with his patient, and if he falls short in any of these elements of success, failure stares him in the face. To the dentist, then, physical condition is of the utmost importance.

A man in poor health is not an attractive animal; he is liable to be cross, unsympathetic, nervous; his mind is not under control; he is exposed to every condition that operates against a large and lucrative practice.

Fatigue is a condition to be reckoned with in the race for success and is a far greater handicap to the dentist than is generally recognized.

Fatigue is a chemical process. At the end of the eighteenth century Lavoisier, in a series of chemical analyses, succeeded in demonstrating a fact of fundamental importance, namely, that muscular exertion increases the quantity of oxygen absorbed and of carbonic acid eliminated by man.

A self-respecting dentist will never admit that his services are not

worth at least as much as the services of his neighbor dentist. He will endeavor to look and act like a gentleman, avoiding at all times the air and dress of a sport, seeking by close reading of good books, biographies, essays, etc., to make himself acceptable or interesting among cultured people. He will not permit himself to become associated with a church unless he is a pious man. He will not sign himself M. D. even though he has a medical diploma, unless his knowledge of medicine is sufficient to prevent his being laughed at by medical men. He will not preach prohibition then step into the laboratory and take a drink all alone.

To be known as a cheap dentist is fatal. If by word or action you have given your clientèle to understand that you are as cheap as anybody, you, that moment, forfeit the right to good fees, for by good fees we mean a fee that is at least a little higher than that of any of your confrères. On suitable or proper occasions *state* to the patient as modestly as possible that it is your desire and effort at all times to charge more than other dentists in your community.

The patient will always come back at you with the remark that you must think that your services are better than those of other dentists. A quiet rejoinder to the effect that the patient will have to decide that question, will place you squarely on your merit and there should be no argument about it. You have declared to the community your platform and must make your services up to the standard you have declared. People of worth admire courage when backed up by good results; even God *hates* a coward.

Do not work for people who rouse the worst side of your character; who are disagreeable and quarrelsome. Do not lose your temper, but say to them, in a quiet, earnest way: "You and I are not going to get on nicely together. I seem to annoy you, so I believe we had better agree between ourselves that it will be much better for both of us if you will go to some other dentist. Here is a list of a few of the most reliable dentists in town. I can recommend them. I believe you will be pleased and safe in their hands." Be gentle but firm. You are simply discharging them before they discharge you. Be first.

After having a hard time collecting a bill, always sign the receipt as follows:

Received payment— Trusting this will end our business relations, I am yours truly, etc.

Never let a patient discharge you if you can avoid it. Always be careful to maintain your own self-respect by being as respectful as the case will permit, to all concerned. Do not lower your dignity or wear your life away working over children for a smaller fee than the same service commands from an adult.

People do not want you to work for nothing; they are always suspicious of bargains, and if they do not appreciate what you are trying to do in these cases it is your own personal fault.

The alloy filling is another cheap spot in our practice. Yet the alloy filling will show a larger per cent of profit yearly, if properly handled; and at the same time they will ruin any practice finally if inserted in any but the most thorough manner.

What is a good fee for an alloy filling? I would answer: charge and collect twenty-five to fifty per cent. more per filling than any dentist in your neighborhood charges. That would be a good fee provided you can make the advance *good.*

A fair fee for any and every kind of treatment is expected by a patient worth having. In fact, they begin at once to lose respect for your services when you say, by your action, that it is not worth anything, or worth so little that the patient holds you in contempt or pity.

Naturally if you place such small value upon yourself, society will take you at your own estimate and seek one who has been better able to hold higher respect in the community.—*Dental Summary* (from *Western Dental Journal*).

COMMON SENSE

WHY WE SHOULD CONSIDER FINANCES

Compared with other body specialists, oculists, aurists, rhinologists, orthopedic surgeons and the like, dentists are the hardest worked, least appreciated and the poorest paid of all. This is an assertion capable of proof. In my estimation we rank as high professionally as other specialists; we have as good a quality of brain fiber and have made and are making as much progress in advancing our profession; we are recruiting from the same ranks; and yet these other men have placed their specialties on a higher plane and have taught the general public to so consider them. What is the reason? Does not the conduct of a high-class dental practice involve as much physical and mental strain, must we not be as familiar with the local anatomy, must not our technic be as perfect, as is the case with other specialists? Then why are we not accorded the same consideration by the public? In my opinion, it is our own fault.

Nose and throat specialists charge $5.00 for the first call and $2.00 for each visit thereafter. These latter visits average from seven to ten

minutes in length, and I have had one specialist tell me he can treat from thirty to forty patients from 8:00 A. M. to 1:00 P. M. Eighty dollars for five hours' work is $16.00 per hour, and this is outside of hospital work. This man is no exception. There are many others like him in every large city.

Does this make you think? Can you come anywhere near it? It takes as much nervous force, an equal knowledge of local anatomy, and greater skill to treat and fill the canals of a molar as it does to remove adenoids. I have seen $50.00 cheerfully paid for the removal of the tonsils when, if a dentist had anesthetized the same person and removed four or five teeth and made a charge of $10.00, the patient would have howled with indignation and disapproval. Why is this? Whose fault is it? Our fault, every time. Our services command just the value we place upon them. Our work is just as difficult and important as that of the throat specialist and if our patients were educated to believe this, they would pay us prices in proportion.

From another viewpoint, is it right that a dentist should take the risks he does in operations about the mouth for such small remuneration? Is it fair to himself or his family? In case of trouble, not counting death, but minor accidents only, he is liable to a suit for damages of from $2,000 to $10,000. Our fees should be in proportion to our risk. It is folly to give a general anesthetic for one or two dollars and take this risk. Let us take a leaf out of the life insurance companies' methods and "compare" them with ours. They are past-masters when it comes to figuring out costs in relation to risks. They are specialists in that line.

Let us assume they write a $5,000 policy. Their risk is $5,000. For that risk they will charge $25 per thousand, or $125. Now, many surgical operations cost the patient $125, and, by comparison, the risk to the operator is even less than to the insurance company in issuing a $5,000 policy, but think what the dental profession charges for the same risk. The insurance company will only pay $5,000 on that $125 risk in case of death, whereas the dentist may be called upon to pay that much in damages for minor accidents only.

It is these and various other phases of our professional life which prompt me to write this opening paper on why we should consider the financial aspect of our professional life.—*Oral Hygiene,* Aug., 1911.

Investing your principal safely is the first essential; but

It is equally important to deposit your securities where fire cannot destroy and thieves cannot enter.—*Weekly Financial Review.*

WHY IS THE REMUNERATION OF THE AVERAGE PHYSICIAN SO LOW?

THE Medical profession is waking up to the commercial side of practice and a new journal has been launched to give more forcible expression that it is no disgrace to earn *and get* a competency. The name of the journal is *Successful Medicine.*

If the average income of physicians is what some writers think, about $1,000.00, it is less than I believe the average dental income to be. What investigations I have been able to make indicate that dentists earn, on the average, about $1,200 annually over office expenses. The task of living and saving a competency on this pittance is so great as to be practically impossible under even favorable conditions.

THE DENTAL DIGEST welcomes this new member in the magazine field and wishes it success. The editor has already foreseen that it will be criticised unfavorably by many, and by none more than some whose families are in need of an application of these teachings. THE DENTAL DIGEST insists that there are two sides of practice; the professional side which deals with theory and practice; and the business side which deals with the getting and holding of patients, the establishment of remunerative fees, and the collection of those fees. In other words, the business side of practice has to do with getting a good living for you and yours as long as you live.

Dentists are better business men than they were a few years ago. Among the contributing causes to the advance, this magazine holds an honored place. And while some dentists will not have it in their office because it is so commercial (kind of low-browed, you know), it has many warm friends who value it because of the practical help it has rendered.

May it be so with *Successful Medicine.*—EDITOR DENTAL DIGEST.

REPRINTS

THE reason for the low average remuneration received by the medical profession seems to me due to a mental attitude induced in part by education and confirmed by habit.

The student in college, without previous business training, is impressed with the fact that he is entering, not upon a business, but a profession semi-eleemosynary in character, in which he must consider the relief of suffering humanity first, and regard his remuneration a secondary consideration. He spends four studious years in medical school and probably follows this by a year or more in a hospital, during all which time he is being supported.

In his period of training he has seen men eminent in the profession giving freely of their time and earnest thought without the slightest hope of remuneration. verifying what he has so frequently heard, that

the poorest laborer can secure for nothing the same skill and attention that the millionaire can purchase.

He makes his choice of location and finds himself surrounded by men devoting themselves earnestly to their work and receiving but little for their service. Most of those to whom he has an opportunity to minister earn scarcely enough to secure a decent livelihood and have nothing laid by for an emergency; indeed, with the plethora of charitable institutions, many of them do not appreciate such necessity. Long-continued illness, especially where the sufferer is the bread-winner, lessens his ability to repay his medical attendant, even though he be willing.

Years of such work atrophies what little business sense the physician may have had. When he sees his colleagues, old in the profession, living similarly, it is difficult for him to pull himself up to a proper systematic course. He probably finds that it is the rule to send statements but once in six months, when all sense of the obligation has faded from the mind of the patient and he feels that the doctor has rendered him an exorbitant bill.

As family responsibilities come, he is more firmly tied to his course. He does not have the means to brush up, buy new books, secure proper instruments and drugs, becomes discouraged and drifts.

* * * * * * * *

Only through proper education and systematic consideration of his interests, with the determination that his services shall command remuneration, can the physician hope to better his position.

E. E. Montgomery, M.D.

Philadelphia, Pa.

The factors which enter into the low incomes of physicians are largely of their own making. I consider that the prime reason is the willingness of many physicians to accept low fees for services. In addition, the average physician submits to imposition and adopts this course to protect himself. Many a physician will repeatedly render services to persons who never intend to pay and never have paid unless forced.

I can read the horoscope of medical practice in this country and see the time ahead when the practice of medicine will be controlled and administered by the state. The only exceptions to such a practice being men who are either employed by the state as specialists or who are allowed to practise as such because of their unquestioned ability in a particular field. This must come about for the protection of the weaklings not able to take care of the business side of the practice of medi-

cine and with such a desirable administration there will be no longer the evils of medical practice which now arise from the enforced necessity of the "*sauve qui peut.*"

ISADORE DYER, M.D.

New Orleans, La.

No one knows what the average income of physicians is; that is all guess work. You and I know that many earn from five to ten thousand dollars a year and others earn five to ten times as much, and if you add them all together and average them, you can readily see that there must be some who do not earn $100 a year. You can easily figure it out. Say, one man earns $5,000, hence there must be five others who earn altogether only $1,000, which makes $6,000 or $1,000 apiece.

Now you do not believe that, and I do not. Let us say that there are in this city—Detroit—500 physicians (there are more). Five per cent. of them earn at least $10,000 a year, and another five per cent. of them earn half that much and another five per cent. below or above that last sum. Then the total for these seventy-five would be about five hundred thousand dollars. Now you do not believe that the other 425 do not earn anything?

Through my experiences and inquiries for a great many years, I am convinced that all the rest earn between two and three thousand dollars a year. Add that to the other and you can readily see that the average income must be about $3,000 a year.

* * * * * * * *

I am frequently called to the country all over the state in consultation, and I have inquired of dozens and hundreds of physicians in the country about their practice, and about their income, and I find it just the same there as here. No one has so large an income as a *few* in the large cities, but their expenses are far less also. I can find many physicians in the smaller towns who earn $5,000 a year. They collect a larger per cent. of fees than the city physician does, and have far less expense, as a rule, but they have to work harder physically.

J. H. CARSTENS, A.M., M.D.

Detroit, Mich.—From *Successful Medicine.*

(*This article is expected to be continued in the February issue.*)

EXPERIENCES

Editor DENTAL DIGEST:

Please find below an accurate account of my business for one year beginning April 1, 1910, and I wish to say that the dental colleges are not giving to their students what they need most, the business side of dentistry, and I feel very grateful for the help I have had through the DIGEST.

The majority of the graduates from dental schools have been in school constantly since beginning the kindergarten, and when they leave the dental school to compete with the wide world, it is a wonder that more of them do not become discouraged.

I have a lecture always ready for any patients when they inquire why their teeth decay or become loose and I have fillings placed in extracted teeth to show why some fillings fail, and how we have studied to prevent this.

I think that if every dentist would explain more to patients in regard to the care of the mouth, etc., we could demand greater fees, and they would pay them willingly.

I have a little pamphlet, "Facts about Teeth," and I make it a point to see that every person takes one when leaving my office.

My office expenses are as follows:

Rent	$128.00
Phone	32.00
Fuel	10.00
Laundry	6.00
Subscription	9.00
Insurance	5.00
Booklets, Advertising	45.00
Supplies	534.00
	$769.00

Yours respectfully,

C. E. B.

Editor DENTAL DIGEST:

Having just read "St. Anthony's" letter in November issue of your most valuable journal, it made me sit up and take notice.

Now I do not wish to "call" St. Anthony, but I would like to know—How did he do it? Doing $3,276.00 cash the first year of his practice is "going some." Admitting that he does get good cash prices, getting the people into his office—"Aye, there's the rub." $3,276.00 means that he must do on an average of $273.00 per month from the

first month of his practice. It is hardly supposed that one would do this amount right from the start, so let us say that $400.00 is done during the first four months, which would not be at all bad; that leaves $2,876.00 for the last eight months, or an average of nearly $12.00 per day, counting Sundays and holidays (and Brother Bill doesn't work on these days), making a pretty fair average any old time for a dentist in a medium sized town—and this done the first year, too, mind you! There are many practising, and good men, too, who never see that much per month even with an established practice.

If he is not an advertiser, how is it that in only one year's time his reputation has extended to other towns? And another thing, is it only necessary to take the lid off of prices in order to have the people rushing to *your* office when in need of dental services? There is nearly always another dentist around the corner that is as skilled as you might be, and if the other man has an established business, is a good workman, keeps his office up in good shape, etc., you have your work "cut out for you."

I have gone through the starvation period once, and am now at it again, having disposed of my practice and moved to another state. My present office is about everything one could desire in the way of an office. I have had experience in conducting a dental practice successfully and yet I think I am doing well to do even half of St. Anthony's business the first year.

I am an advocate of Brother Bill myself, having followed his teachings for the last couple of years, but to "cash in" $3,276.00 the first year is surely "some stunt" "and I ask to know:" How did he do it?

Yours truly,

L. E.

Editor DENTAL DIGEST:

Will you kindly publish the following in your next issue or submit same to Brother Bill for advice?

Am twenty-nine years old, graduated in 1909 with honors, and am considered a first-class all-around man, but from a financial standpoint my success in the profession has proven a failure. I first started practice in New Mexico, thence to Colorado, and am now located in one of the largest cities in Texas. The latter place I have been since last April.

Our city is an ideal place in which to live, but it is full of dentist advertisers and all kinds, consequently fees are very low, and living expenses are very high. Am associated with a good man of about three years' standing, his last year's gross income being approximately three

thousand dollars. Taking all into consideration I am greatly tempted at times to move to a border town composed of about 75 per cent. Mexicans (as my wife speaks Spanish fluently and I speak it fairly well), with the expectation of increasing my fees 25 to 50 per cent. and also decreasing living expenses. I failed to mention that our office here is located, not in an office building, with elevator service, etc., but on the second floor front, over a milliner store, and photograph gallery in the rear and on the leading business street of the city. I did not intend to write this as an experience, but had to go into details to make myself understood.

Will Brother Bill or some experienced brother dentist proffer advice? Shall I stick where I am or trust to luck in the border town where fees are higher and expenses lower? E. S.

Editor DENTAL DIGEST:

Kindly allow me to say that the article written by "A. G." and appearing in the November issue is something fine. I wish every dentist would read it, as it is just such articles that have caused me to raise my fees about 40 per cent. in the last few months. About three years ago I quit taking all dental journals because I had previously read so much of putrescent pulps that I began to think I was one, but when the DIGEST started putting something else into our heads I subscribed for it and would not now be without it for a good deal.

I was talking to a dentist in one of the large cities a short time ago and I asked him if he took the DIGEST. He said: "No, sir, I would not allow a commercial dental magazine in my office." I did not say much, but this is what I thought—the Lord said: "The poor ye have with ye always;" He might have said fools, and not have gone outside of the bounds of truth.

I think that "A. G." and "Brother Bill" are certainly barking on the right track.

Wishing the DIGEST unlimited success, I am,

MICHIGAN.

IT is said that a chain is only as strong as its weakest link; it is equally true that

A company is only as strong as its weakest mortgage.

If a company can meet its interest charges regularly, it can be taken for granted that there will be no default in payment of principal; bear in mind that

A corporate mortgage is rarely paid off, being either extended or replaced by a new one.—*Weekly Financial Review.*

WE PREFER CHARGE ACCOUNTS ALL WORK DONE BY ASSISTANTS

The Wonder Dental Parlors

DR. I. SKINUM, PROPRIETOR

DR. I. AMIT, FIRST ASSISTANT

Milwaukee, Wis.,

*Dr. Wm. Thomas,
Care The Dental Digest.

My Dear Doctor:

How lucky for you to advertise in The Dental Digest, and how fortunate it was that I should read your article inviting correspondence on "The Graduated Dental Assistant."

It so happens that I am the one man who can give you the exact information you desire, and I am the one who will win that little old twelve, by giving you a solution which will hold any graduate assistant you may care to hire.

There is only one way to hold a man constantly in your employ, and that is to keep him in a thoroughly satisfied frame of mind.

I would suggest that you start him at $75 per week, but you must also make him think he has an interest in the business, and to do this allow him fifty per cent. commission above his salary.

You must give him access to your home at all times, and the use of your automobile, without any obligation on his part to keep it in repair.

If you give him enough privileges of this kind, and are perfectly honest with him, he will never be tempted to steal from you. I suggest that you ask him outright, just how long he expects to remain in your employ, and then arrange your business so that he can have the controlling interest at least, after the allotted time and unless some most extraordinary concatenation of circumstances arises to interfere—such as gout or an inheritance—he will never open an office in competition.

If you follow my instructions implicitly you will need no contract with him, although if you are a very wealthy dentist, you might suggest his marrying your daughter, providing she is sufficiently endowed with beauty and other attractions.

You will have no trouble in influencing your patients to allow him to work for them. A method I use with all new assistants, is having them wear a peculiarly constructed glove, which I have patented. It is made of fly paper and the patient always sticks.

* The following letter (written on the letterhead here reproduced) was sent us by a competitor for the best answer to Dr. Thomas's letter, printed in the Jan., 1911, issue.

I suppose, Doctor, you think I am radical in many of my suggestions, but I am from a town that teaches the best treatment of the man employed, and a happy thought makes me believe you would do well here yourself, and that you would meet with wonderful success.

It is not uncommon for some of our aldermen to retire with much more than that for which you have wished, and your letter suggests that you have wonderful capabilities for discernment and execution, and you might be our next mayor on the Socialist ticket.

I have no objection to your publishing this letter to help any dentist who is having trouble with his employers, but the prize I will be unable to receive, as I am leaving shortly for a trip into the frozen north with Dr. Cook, and I suggest that you use it for charity among members of the Ananias Club.

I have no doubt that I have solved the problem for you, and this thought alone is sufficient recompense.

During my absence, I have instructed my employer to look out for your future letters in THE DIGEST, and to save them for me. I am going to learn how to insert amalgam fillings in a land where mercury freezes.

I beg to remain,
Fraternally yours,
DR. I. AMIT.

THE EDITOR'S FAMILY TAKES HIS PRESCRIPTIONS

THE Editor of THE DENTAL DIGEST has a sister living near Boston. She recently had some dental work done and received a considerably larger bill than had been expected. She visited her dentist and asked for an explanation. He said: "You'll have to charge the difference up to Dr. Clapp of New York. He has shown me how to make a real profit for the first time in my life." "Well," said his sister, "Dr. Clapp is my brother, and I'm glad he has helped you, but I wish I'd had the work done before your prices went up."

THE W. D. Miller Dental Club of Pittsburgh, Pa., at their last meeting held on December 5th, elected the following officers for the ensuing year: President, Dr. J. N. Katz; Vice-President, Dr. A. Belber; Secretary and Treasurer, Dr. G. P. Goldman.

PRACTICAL HINTS

[This department is in charge of Dr. V. C. Smedley, 604 California Bldg., Denver, Colo. To avoid unnecessary delay, Hints, Questions and Answers should be sent direct to him.]*

To Free a Clogged Fountain Cuspidor.—Remove catch cup and inner bowl, if such; invert a clean rubber plaster-bowl over the outlet and exert a steady pressure upon it several times, taking care to close the overflow pipe with the thumb or finger.—R. L. Lamphere, D.D.S., Duluth.

Repairing a Plaster Model.—Liquid court plaster spread on the fractured surfaces of a broken plaster model and the parts pressed into place and heated over an alcohol or Bunsen flame makes a quick and strong repair.—Dr. J. E. Burchill, Cortland, N. Y.—*The Dental Brief.*

[Liquid Celluloid, made by dissolving celluloid in acetone, should be kept on hand in the laboratory at all times for repairing plaster models and cut or scratched hands. No heat is required.—V. C. S.]

Preparing Sensitive Teeth for Gold Crowns.—If, when grinding teeth preparatory to inserting gold crowns, three or four thin carborundum separating disks are mounted together on the screw mandrel, instead of the heavy stones ordinarily used, it will be found that by moving the disks back and forth over the surface of the tooth it is possible to cut much more quickly, and there will be much less discomfort to the patient, as there is less friction. The spaces between the disks hold the water far better than the surface of the solid stone.—J. Neales, D.D.S., Providence, R. I.—*Dental Cosmos.*

Carborundum Points for Cavity Preparation.—At a recent meeting of the Pennsylvania Association of Dental Surgeons, Dr. E. C. Palmer showed an easy method of mounting small carborundum points for cavity preparation. He cemented the points into a socket dental

* In order to make this department as live, entertaining and helpful as possible, questions and answers, as well as hints of a practical nature, are solicited.

engine port polisher with shellac, and while the shellac was still soft revolved the tool with the engine against a piece of steel with light pressure until it ran quite true. These small points quickly wear out, they now and again break, so a ready means of replacing them is necessary. With the heat of a spirit lamp he fused a little shellac on the point, and heating the port polisher, the socket of which was coated with shellac, he then pressed the point into place, held it a moment against a steel plate until it ran true, and chilled it in cold water. He then showed how quickly a broken or worn-out point could be replaced by heating the port polisher, removing the old point and placing a new one in its place. It was done as quickly as a sandpaper disk could be changed. These points are not expensive, and are especially useful in giving the finishing touch to cavity margins.—*The Dental Brief.*

Stick Solder.—Stick solder is made by cutting the solder in strips, but not quite to the end of the piece, making the cut alternately from each end, so that it may be bent to form one long strip. For delicate soldering operations such as are encountered in crown and bridge work, this form is preferred by some workmen. It is used with a soldering fluid composed of a saturate solution of borax to which is added very little, a few drops only, of hydrochloric acid. The point where the solder is desired is heated to about the fusing point of the solder, the end of the strip is dipped into the soldering fluid and then pressed where it is needed. It is more under control than is solder cut into small squares. It carries with it to the point where it is needed enough, and not too much, flux. The flux is always clean. There is no delay in adding more solder as is the case when squares are used, and there is less risk of getting too much.—*Dental Brief.*

Straightening Molars Tipped Mesially.—If but one molar is tipped, the tube on the anchor band for the normal side should be placed in the usual way. The other should be so attached to the anchor band that when the expansion arch is inserted in the tube on the normal side, the other end of the expansion arch should be on the same plane with the tube that is to receive it, from a vertical view, but from a horizontal view the mesial end of this tube should present toward the gingiva. If this arch is now sprung in place, the tendency will be to tip mesially the normal molar, and at the same time straighten up the tipped molar. Owing to the difficulty of depressing teeth in their sockets, the normal molar scarcely moves at all, and the tipped one is made to assume its normal position.

When a molar on each side of the same jaw is tipped, the tubes

should be placed so that when the arch is inserted, the front portion will lie, when passive, at least one-eighth of an inch below the gingiva border. The arch should then be sprung to the proper position and firmly ligated to the canines and incisors. This will tend to tip the molars back, and at the same time depress the anterior teeth. The latter movement will be so slight, however, that it will not be noticeable, and as soon as the pressure is removed, they will readily return to their former positions. This manner of adjustment is also used to create stationary anchorage of the lower dental arch in order to tip the upper molars distally, by means of intermaxillary force. It has been found that it is impossible to move molars bodily distally, in either the upper or lower jaw, unless they have been previously moved mesially.—J. L. Young, *American Orthodontist.—Dental Cosmos.*

Advantages of Lining a Cavity with Cement Before Filling It with Amalgam.—The following reasons indicate the lining of a cavity with cement before inserting an amalgam filling: The resulting filling is more adhesive and the dentinal tubules are better sealed. It will often save a front wall by strengthening it, while amalgam alone would break down. Cement, being non-conductive, often prevents irritation to the pulp, and will also prevent discoloration of the enamel wall. Where accidental removal of the amalgam has taken place, the cement layer will keep away caries in cases where it is inconvenient for the patient to have the filling repaired immediately. The cavity need not be cut so deeply, and often cutting into sensitive dentine can be avoided, which fact the patient highly appreciates. Amalgams are more liable to produce pulp stones than is cement. There is less shrinkage, the cavity requiring a smaller quantity of amalgam. Cement is easier to manipulate than amalgam alone. It takes less time than amalgam alone.

To insure success, the cavity must be absolutely dry. It is cleansed with hydrogen dioxide and alcohol, and then dried with a hot-air syringe. Union between the cement and the amalgam must be made complete by pressure. The amalgam must be ready mixed, then the cement is introduced in a creamy consistence and the amalgam is worked in rapidly upon the cement, before crystallization commences. The margins of the cavity are cleansed of surplus cement, then the remainder is filled with the amalgam, using pressure throughout.—J. Jones, *Elliott's Quarterly*—from *Dental Cosmos.*

DIGESTS

PATENTS AND PATENT LITIGATION OF THE DENTAL PROFESSION PAST AND PRESENT*

By J. N. Crouse, D.D.S., Chicago, Ill.

There is another mistaken idea which seems to cling to many members of the profession, and that is, that process patents cannot or should not be valid. Many are asking why, since I fought and did away with certain process patents in the past, do I not take this process patent of Taggart's and treat it similarly. What is to hinder other process patents being thrust upon us, they ask? These questioners lost sight of the fact, that here are patent claims which in the opinion of good judges will stand the test in Court because they are legitimate and based on the well-recognized principle that for a thing to be patentable, it must be new and useful. Let me ask, What is a process patent? I can think of hardly a patent that does not involve a process. What constitutes a valid patent then? There is no more well-established principle relating to patent law than that the thing patented to be valid must be new and useful. The essential elements of utility and usefulness are the basis of our whole patent system and the statutory enactments thereunder. It is often difficult, and at times impossible, for the patent office to determine simply from an examination of the thing presented for a patent grant whether such thing is a new and useful improvement. As a matter of fact the patent office is unwilling to assume the responsibility of determining whether the elements of newness, usefulness and improvement in the thing presented actually exists. Therefore, many patents are granted which are neither new nor useful and must come under the head of worthless patents. It was largely such patents as these which, in the past annoyed the dental profession.

You may ask, Is Taggart's invention new and useful? Some men claim to have done these things before Taggart. Granting for sake of argument that they did, which I am certain in my own mind they did not, let me ask, did these men give the ideas to us so that we might make use of them? Is there any man present who really doubts but that for Dr. Taggart we would still be filling teeth in the old way?

* Read before the Chicago Dental Society, September, 1911. Published by the courtesy of the *Dental Review*.

Is there anyone here who is willing to give up the method given us by Taggart in every detail, and practise as he did before? I do not believe there is a man here to-night who would willingly give up the use of Taggart's method and fill teeth as he did before it was known for one hundred times what Taggart has offered to accept by the terms of the Dental Protective Association's agreement.

In answer to those who seem to lack confidence in the ability of the officers of the Dental Protective Association to determine valuable from worthless patents, and fear that the latter might be recognized in the future, let me say this: If anyone presents a patent based on the principle of being new and useful, he will be given due consideration and an opportunity offered for treating the members of the Dental Protective Association fairly. This is just what we did with Taggart, and let me say to his credit, that he was willing to be fair. What more could we ask? The association in the future, as in the past, will endeavor to protect its members, but its members only, from abuse. If this can be done by compromise, all well and good; if not, the association will exhaust its funds in attempting to protect its members. This is one of the strongest arguments for the existence of such a fund as we hope to create, for no sane man or group of men would attempt to abuse the members of any organization if he or they knew that a large sum of money was ready to be expended if necessary to prevent such abuse.

Since announcing to the profession the terms of the agreement with Taggart, I have been accused of not doing my duty because I did not fight Taggart and try to invalidate his patents. Why should I have fought Taggart when he was willing to treat the members of the Dental Protective Association fairly? I have always posed as an honest man, and no honest man would fight Taggart under the circumstances. Surely, I would not as long as he attempted no abuse of the members of the association. Some, who do not understand the situation and who seem more willing to criticise than to put their shoulder to the wheel and help, say that the Dental Protective Association was organized to fight all patents, good, bad and indifferent. Since I organized this association myself, I ought to know the objects of its organization, and I know of no better way of stating this to you than to quote from the second circular that was issued to the profession in June, 1889, over twenty-one years ago. In this circular I said:

"Its first object, as stated in the circular, is to defend the profession against the unjust demands of patentees whose claims are worthless. Let it be distinctly understood that it is not the design of the Dental Protective Association to interfere with any man's legitimate

business or valid patents, but to stop the enormous abuse of dental patents.

"Its second object is to bind the dental profession together for mutual protection, strength and helpfulness, with a bank account and without politics.

"An organization for defense must necessarily differ widely from one for social or political purposes. It must be ready for war at any moment. To insure this, the authority needs to be in the hands of a few. Such an organization is the Dental Protective Association. The power is invested in the directors; the responsibilities are borne by them, and all risks as well. They can sue or be sued, are accountable for the proper handling of the funds, and must take charge of the suit of any member of the association who is unjustly sued for infringement. Every member by paying a fee of ten dollars ($10.00) and assuming a liability of ten more, only (which latter will probably not be needed) can continue his practice undisturbed, knowing that if sued, he will be furnished with the best of legal talent and evidence, and be relieved of all costs and harassment of suit. It will at once be seen that the largest expenditure of the association must be that of time, energy and thought on the part of the directors, since there are no salaried officers, and expenses are kept at the minimum.

"The first and greatest adversary, though not the only one, with which we have had to deal, is the International Tooth Crown Company. Do you know how nearly you have been in its jaws? Look at a list of its patents. On bridge-work it has several, including the Low, the Richmond, and the Sheffield bridges. It has a patent on preparing roots for crowns, which includes a patent on freezing the tooth, a patent on cutting off the tooth, a patent on killing the pulp, and on driving it out at the same time (if you can), a patent on filling the end of the root, and a patent on filling the root with material suitable for holding the metallic pin or screw which supports the crown or bridge.

"It had even a patent on the cement for securing crowns. On crowns it has many patents, including the Beers or gold crown, the Bitner crown, the Richmond crowns and the Sheffield crowns; several of each of the last two named. It has patents on crowns with bands and without bands; patents on crowns secured with screws and without screws; a patent on crowns secured with gutta percha, a patent on crowns secured with cement and a patent on crowns secured with both gutta percha and cement. It has also a patent on crowns covering the end of roots. In fact, if the validity of these various patents owned by the International Tooth Crown Company should be established, it would seem as if all the other crowns now in use would be declared an

infringement on that company's crown patents. Then this company has also a patent on use of trial plates, a patent on getting articulating models, and a patent on investing the piece of soldering."

I quote the above simply to show that the accusations against me at this time are absolutely incorrect. I have uttered these sentiments time and time again during the past twenty years, to wit: *that the Dental Protective Association was not organized to deprive a man of his rights,* and in this instance after examining the patents which Dr. Taggart now holds, I am more and more convinced that the Court will in due time validate them; and in all the discussions I have heard, I have had but two men say he was not entitled to at least the small sum of fifteen dollars ($15.00) as compensation.

In this paper I have abstained from discussing the question of ethics in relation to patents or the propriety or wisdom of dental inventors taking out patents, except to say that there is no reason why an inventor should not be compensated for his inventions, and the only way for him to get compensation is to patent his discoveries, and the proof of this assertion is well illustrated in the present case. In this connection, I wish to call attention to a very able article in the September number of the *Dental Review,* by Dr. Edmund Noyes, wherein the subject is treated exhaustively and ably and which should be read by every dentist.

Ever since the organization of the Dental Protective Association, I have at various times been accused of all sorts of unwarrantable acts. I have been criticised alike by the companies which I was fighting, and by many of the members of the profession on whose behalf I was making the fight. Sometimes I have answered the criticisms and sometimes I have not, because I have felt confident at all times that my acts would eventually be judged by the results, and I was willing to stand or fall by this test. Then, again, I knew that much of the criticism was based on a misunderstanding. This I feel is especially true of the agreement in the Taggart case, and my present plea is that men will look carefully into the merits in question before passing judgment. I have never claimed to be beyond the possibility of mistakes, because to be that I would be something more than human; and yet in this Taggart agreement I have had ample time to think it over, and I do not believe that any mistake has been made. In any event, I am willing to await the verdict of time and experience, and I have little doubt of the ultimate endorsement by my profession of the position I have taken.

In order to give something like a comprehensive review of the past and present patent litigations, it has been necessary for me to omit

the discussion of patents on celluloid or aluminum and many other unimportant patents. As this paper is already unusually long, I hope you have not been wearied to such an extent that you cannot enter into a thorough and earnest discussion of the questions involved. I thank you for your patience.

ADAPTING FULL RUBBER DENTURES *

By Edward M. Kettig, M.D., D.D.S., Louisville, Ky.

I have selected as my subject the adaptation of full vulcanite dentures because it is safe to say that we are making many more vulcanite plates than any others, collectively speaking, and naturally these are of the greatest interest to us.

When intending to construct a full denture on vulcanite or any other basic material, we find that if the plate is to have the adaptation to which the patient is entitled, many points in the construction must receive our most careful consideration. Just as the strength of a chain is equal to the strength of its weakest link, so in a full denture any defect in one of the many details of its construction impairs the usefulness of the denture as a whole.

PREPARATORY EXAMINATION OF THE MOUTH

The first step in the work of constructing a denture is to make a thorough examination of the mouth. This is usually carelessly done, and should receive more thorough attention. If we are to really adapt the proposed plate to the area of tissue presented, we must know the nature of the tissue. Age and sex play a part in edentulous arches, but each case presents individual characteristics of its own. We must study the topography of the parts. In the upper arch we should ascertain the hardness or softness of the parts and the dimensions of the alveolar ridge, and see especially to the muscular attachment. Ligamentous or cicatrical attachment of the submucosa, present at times along the line of the bicuspid or molars, is found to be too near the level of the ridge, and in some cases attached beyond the ridge, rendering it impossible to adapt a plate without surgical interference. The compression to which the plate area may be subjected without irritation should also be deter-

* Read before the National Dental Association, Section I, at Cleveland, Ohio, July 26, 1911.

mined, for unless this feature of our work is considered to its fullest extent we need not expect the denture to render satisfactory service while in use. The limits of the plate, its permissible extent on the plaster model, should be well calculated, and a digital examination in all directions be made, with a view to thoroughly acquainting ourselves with the conditions before proceeding with the work. The lower arch should likewise be studied, only more carefully, if possible, as the plate area is smaller, and the conditions are more complicated than in the upper arch.

TAKING THE IMPRESSION

While plaster in partial cases is probably the most reliable material for taking impressions, I have not been able to obtain the coveted results in taking impressions for full upper and lower dentures. I shall probably be censured for such a statement, as plaster is generally considered the material *par excellence* for all impression work. My object in taking an impression for a full upper denture is, after having accurately fitted a tray, to use a material that will produce the greatest amount of compression of the gum tissue. I am careful not to displace the tissue, but if we are to adapt a plate so that it will not be displaced in the act of mastication, we should compress the tissue, using as much pressure in taking the impression as we expect to be employed when the denture is in use. This is more important in cases of very soft mouths than in those of hard, bony character, as in the former the tissue yields more readily to pressure, and a denture made from an impression taken while the tissue is in a state of repose would be of little service when pressure is brought to bear upon it.

My method, after selecting the proper tray, consists in inserting warm impression compound in sufficient quantity to reach all the area to be reproduced, the S. S. White compound being good for this purpose. The tray is then inserted, and the material pressed half way to place. It is then removed and inspected, to ascertain whether it is being properly directed, any surplus compound is trimmed away with shears, and the material readjusted in the mouth and pressed home in such a way that it spreads beyond the limits of the plate to be constructed. The impression is then removed and chilled, representing a matrix closely approximating the form of the mouth. By trimming away the surface of this impression to the extent of an eighth of an inch in every direction, assurance is obtained that when a new layer of compound is added, it will be equally distributed, as every part of the tray is about the same distance from the oral tissue. For the new layer the Detroit compound is used, for it softens at a lower temperature, and

produces an accurate impression. This compound is softened and spread in a thin, even layer over the inner surface of the first impression. The tray is then quickly introduced into the mouth and pressed into position with all the force that can be reasonably applied. In this way the material reaches every rugosity of the mouth, and the compression of the softer tissues is secured which is so much desired in the adaptation of the plate. After this impression has been chilled and replaced in the mouth, it should stick tightly. If it does not, some error has been made in the technique.

THE MODEL

From this impression the model is secured by using the best quality of builders' plaster, mixing it medium stiff, and adding a small quantity of Portland cement. This model should be quite hard and smooth, and should reproduce exactly the entire area to be covered by the plate. All surplus plaster should be trimmed away, and the model should not lie about the laboratory for several weeks before it is used, but the plate should be made without delay, as time does not improve the model, after crystallization has once been completed. The model is then a reproduction of the mouth with the tissue compressed, yet some alterations are necessary in the majority of cases to allow for still greater compression in certain portions of the mouth and for relief in others.

FINAL CORRECTIONS OF THE MODEL

These alterations should be made upon the model while the patient is seated in the chair, examining the mouth and adding to or taking from the model as the case may demand, judging from digital examination of the parts. If the ridge is prominent, the arch high, the soft tissue scant, alterations on the model should be confined to the posterior portion of the plate. If palatal nodules are present, relief must be provided by spreading over the model which represents these bony protuberances, one, two or three layers of No. 60 tin foil, according to the prominence of these deflections of the palate bone. If in the case under treatment the hard and soft tissues are equally distributed, and no undue amount of either is present, the model should be scraped toward the posterior portion, especially deeply toward the posterior border of the proposed plate. All along the sides of the model, where the plate is expected to exclude the air when drawn against the tissue, it is best to take off some of the plaster. Holding the model against a stiff brush-wheel on the laboratory lathe and brushing off a

thin layer of plaster all around is an effective method, which produces a plate that will lie closely to the sides of the ridge without producing irritation. If the mouth has an unusual amount of soft tissue, and there is not much evidence of bony structure, the model should be scraped considerably posteriorly, also along the sides, with the brush-wheel. In obtaining an impression of such mouths, where the anterior alveolar ridge presents mostly soft tissue, care should be taken to secure the greatest amount of compression without displacing the tissue. In the case of lower models no alteration is desirable, and the nearer the model is a reproduction of the tissue itself without compression, the better the plate will do.

ARTICULATION

The bite should be secured by obtaining the correct relationship on the articulator, being sure that the condyles are at rest in the glenoid cavity. In cases where all the teeth have been lost for some years, and no artificial denture has been worn, the condyles have no special resting-place, and the original condyle path must be re-established; yet placing the jaws as nearly as possible in their normal position is no easy matter. In old age the obtuse angle of the lower jaw, even when a denture is worn, becomes more pronounced, this being a factor to be reckoned with in the adaptation of full plates. Cusps upon molars and bicuspids are no longer useful, in fact they are in the way, and the looseness of the mandible and the many movements of the lower jaw prevent a constant occlusion in one place. The angles of force in mastication should receive due regard in the arrangement of the teeth, so that all pressure brought to bear on the upper or lower teeth should be directed toward the center of the mouth. It is better to have the teeth so arranged that the arch in the posterior portion will be too narrow than too wide, as the fit of the plate is usually destroyed when the molars flare out into the buccal walls too much off the center of the ridge, no matter how accurately the plate is adapted otherwise. Anatomical articulation of the teeth is no doubt the correct principle in arranging artificial teeth, but occasions arise when these rules cannot be adhered to strictly, and we must arrange teeth according to age and conditions.

INVESTING AND VULCANIZING

After all these details have thus far been complied with, the flasking should be most carefully done. The wax model should be covered with heavy tin foil, if the finished plate is to possess a surface as free from

porosity as possible. The plaster for investment should be of the hardest variety obtainable, since great stress is brought to bear upon it laterally when the bolts are tightened, and it is subjected to compression to a marked extent. Escape gates for surplus rubber should be liberally provided, so as to overcome undue pressure. An otherwise beautiful piece of work is often ruined by improper vulcanization. We are all apt to be in too big a hurry with our work, and vulcanize too hurriedly. If from one to one and one-half hours are allowed for the temperature to reach the low point of 260°, and this temperature is retained for from four to five hours, far better results would be obtained than by vulcanizing too hurriedly. It is hard to believe that there is such a difference in the quality of the vulcanite, yet it goes without saying that the adaptation of a slowly vulcanized plate is far more perfect than that of a poorly vulcanized denture.—*The Dental Cosmos.*

SELECTED TOPICS FOR MONTHLY HEALTH CAMPAIGNS AND CLUB PROGRAMS, 1911-1912 *

Dentists who wish to awaken the parents in their communities to the value of oral hygiene will do well to offer this program to some of the social clubs of their community.

They should be prepared to do their part of the program, if requested, by giving a plain talk on tooth and mouth help.

Get the mothers interested. Then there will be something done.—EDITOR.

JANUARY—MOUTH HYGIENE—TEETH INSPECTION

(1) What is Oral or Mouth Hygiene?

(2) The relation of the teeth to health; on teeth examination of school children in this community.

(3) Reports: On education of children or adults regarding the care of the teeth; are there facts available concerning the condition of the teeth of school children of this community? Have the local dentists planned to help this movement?

(4) Talk by a local dentist on "How to care for the teeth," with a child to illustrate.

(5) Discussion—"What can we do about it?"

(6) Committee appointments—Plans for doing something.

* General Federation of Women's Clubs.

By G. Elliot Flint

Author of "Power and Health Through Progressive Exercise."

To prevent disease, thus doing away with the painful and tedious necessity of curing it, is the aim of most physicians to-day.

It has long been recognized that hardly any severe disease can be cured absolutely; weaknesses often remain, complications ensue, and not infrequently some permanent disability follows.

For example, "cures" of infantile paralysis are followed by lameness due to the wasting of certain muscles; pneumonia and influenza may be roads to consumption; persistent indigestion sometimes leads to ulceration and even to cancer of the stomach; while that commonest of all ailments that afflict mankind, acute articular rheumatism or gout, is often complicated with St. Vitus's dance, inflammation of the tonsils and of the lining membrane of the heart.

One of the most intractable of all diseases with which physicians have to deal is rheumatism. Often they can't cure it; but, if a paper by a prominent physician of Baltimore, Dr. Gordon Wilson, is to be taken seriously, this torturing disease and its near relative, gout, can be prevented, at least in a great number of cases.*

The first step in the prevention of any disease, however, is to find its true cause; and this is not always easy. Thus it was supposed for years that gout and rheumatism originated from an overabundant and too rich diet; now the consensus of the most eminent physicians is that these dis-

*A digest of Dr. Wilson's paper will probably appear in the February issue. It will interest progressive dentists.

orders are caused by a specific micro-organism, not yet isolated, which gains entrance into the human system through some point of inflammation; notably, inflamed tonsils. In fine, rheumatism, being a "pus disease," it is only reasonable to suppose that its beginning may be at any point where a suppuration exists.

Now, while Dr. Wilson, in the paper just referred to, concurs in the view that both gout and rheumatism are caused by a specific germ, and agrees that, in some cases, the portal of entry may be the tonsils, when these are in an inflamed state, he declares, as his experience, that the source of infection can be found most often in the teeth; and he cites numerous cases to prove that ulcerated teeth and the purulent discharges therefrom are responsible for more of the severer types of rheumatism than we have any idea of.

The trouble known as Riggs's disease is exceedingly common. It is marked by inflammation and tenderness of the gums and their gradual recession from the teeth; the cause of the condition being the formation of tartar on the teeth below their junction with the gums, when the separating of the gum from the tooth permits particles of food to lodge within these clefts, which undergo decomposition and set up suppuration. If, however, the tartar is removed before suppuration occurs, the inflammation quickly subsides, and the gum again adheres closely to the tooth; and, even in the advanced cases, if the teeth are pulled, the gums rapidly heal and assume their normal pink color. It should be added that thorough and frequent cleaning of the teeth with a brush tends to prevent tartar from forming.

In most of the cases of rheumatism cited by Dr. Wilson, attention merely to the teeth and gums, where suppuration was found to exist, resulted in an immediate amelioration of rheumatic pains and an ultimate cure.

To keep the teeth and gums in a healthy condition by careful cleaning with a brush, as well as by regular visits, at least twice in a year, to a competent dentist for treatment of decayed spots, etc., should not be difficult, and would prove to be most economical in the long run. At all events, the evidence just adduced seems to show the need for sound teeth and normal gums to prevent the entrance of more than one disease with its attending complications.

The greater attention now given by all physicians attached to the public schools of New York City to the mouths and teeth of children looks to be a long step in the right direction; for, in the light of scientific knowledge to-day, a thoroughly sanitary condition of the mouth is a health measure of no mean importance.—*Sunday World.*

THE STORY OF THE YOUNG MOTHER AND THE BIG FAT HOG

DR. J. N. HERTY, SECRETARY INDIANA STATE BOARD OF HEALTH, INDIANAPOLIS, IND.

This is not a fable—just straight goods.—EDITOR.

ONE time a little mother, who was only twenty-five years old, began to feel tired all the time. Her appetite had failed her for weeks before the tired feeling came. Her three little girls, once a joy in her life, now became a burden to her. It was "mamma," "mamma," all day long. She never noticed these appeals until the tired feeling came. The little mother also had red spots on her cheeks and a slight dry cough. One day, when dragging herself around, forcing her weary body to work, she felt a sharp but slight pain in her chest, her head grew dizzy, and suddenly her mouth filled with blood. The hemorrhage was not severe, but it left her very weak. The doctor she had consulted for her cough and tired feeling had said, "You are all run down; you need a tonic." For a fee he prescribed bitters made of alcohol, water and gentian. This gave her false strength for awhile, for it checked out her little reserve. When the hemorrhage occurred she and all her neighbors knew she had consumption and the doctor should have known it and told her months before.

Now she wrote to the State board of health and said: "I am told that consumption in its early stages can be cured by outdoor life, continued rest, and plenty of plain, good food. I do not want to die. I want to live and raise my children to make them good citizens. Where can I go to get well?" The reply was, "The great Christian State of Indiana has not risen to the mighty economy of saving the lives of little mothers from consumption. At present, the only place where you can go is a grave. However, the State will care for your children in an orphans' asylum after you are dead, and then in a few years a special officer will find a home for them. But save your life—never." "That is a cranky idea," for a member on the floor of the sixty-fifth assembly said so. Besides, said he, "It isn't business; the State can't afford it." So the little mother died of the preventable and curable disease, the home was broken up, and the children were taken to the orphans' asylum.

A big fat hog one morning found he had a pain in his belly. He squealed loudly and the farmer came out of his house to see what was the matter. "He's got the hog cholera," said the hired man. So the

farmer telegraphed to Secretary Wilson of the United States Agriculture Department (who said the other day he had 3,000 experts in animal and plant diseases), and the reply was—"Cert., I'll send a man right away." Sure enough, the man came. He said he was D. V. S., and he was, too. He had a government syringe and a bottle of government medicine in his hand bag, and he went for the hog. It got well. It wasn't cranky for the Government to do this, and it could afford the expense, for the hog could be turned into ham, sausage, lard and bacon.

Anybody, even a fool, can see it would be cranky for the State to save the life of a little mother, and it could not afford it either.

Moral: Be a hog and be worth saving.—*Dental Dispensary Record.*

THE LUCAS SPLINT FOR THE RETENTION OF LOOSE LOWER ANTERIOR TEETH

By J. H. Crawford, D.D.S.,

A modelling compound impression is taken of the labial surfaces of the teeth to be splinted, including within the impression at least one sound tooth on either extremity of the impression. This modeling compound impression will hereafter be called the temporary splint, and is used for holding the teeth in position while they are being prepared for the splint. The temporary splint is removed and trimmed so that its upper surface inclines lingually, and terminates at the incisal edges of the teeth. The temporary splint is then placed in position, and with right angle burs, 1½ mm. in diameter holes are drilled horizontally in the lingual surfaces of the teeth to be splinted. The holes are placed high enough so that they will not touch or irritate the pulp, and low enough to secure a depth of the holes of about 2½ mm. Care should be taken to drill all holes exactly horizontal and parallel with each other in all directions.

A small quantity of low-fusing inlay wax is then placed in each hole, and double headed platinum pins from broken porcelain teeth are heated and inserted into the holes to a depth of 2½ mm. The excess wax which is forced out is then trimmed away, in order to expose the clean heads of the pins.

Next the labial plate of a crown and bridge impression tray is trimmed off, leaving only the lingual walls and floor. Using this tray and with the temporary splint in position, an impression of the lingual

surfaces only of the teeth to be splinted is taken with quick-setting plaster. When the plaster has set, the temporary splint is removed, a blast of hot air is directed against the labial surfaces of the teeth to soften the wax which is holding the pins in position, and the impression is removed horizontally toward the lingual surface. A perfect impression containing all the pins is necessary. The impression is then painted with shellac and sandarac, and a model is run of investment material the same as is used for inlays.

In separating the impression and the model, the impression is shaved down carefully until the heads of the pins are exposed, and then with a fine instrument the plaster is chipped from around the heads of the pins, so that the whole impression may be removed without withdrawing the pins from the model. The model is then trimmed to a size suitable for investing in the casting machine. The wax splint is then built upon the model, care being taken to cover the pins, carving the splint to the desired final size.

The sprue wire is then adjusted in the center of the wax splint. If the splint is to include more than four teeth, or has a decided curvature, wires for vents should be inserted in the extreme ends of the wax splint. The model should be allowed to become watersoaked before it is invested in the casting cup. The model is then invested, and the casting made.

After having been ground, polished, and finished, the splint is ready to be set at the second visit. If the impression and model have been perfect, the splint will fit as accurately as an inlay. Before the splint is permanently set with cement, the inside of the holes in the teeth should be enlarged very slightly by the use of an inverted-cone bur, to allow for better anchorage of the cement.—*The Dental Cosmos.*

MOUTH HYGIENE JINGLES

SING a song of sixpence, a row of pretty teeth—
Ten in the upper jaw and ten underneath.
When the whole twenty are shown as you sing,
Clean and white and wholesome, it 's a very pretty thing.

—*Dental Dispensary Record.*

BOOK REVIEWS

NOTES ON DENTAL ANATOMY. A POCKET TOMES. BY T. W. WIDDOWSON, L.D.S., England, Licentiate in Dental Surgery of the Royal College of Surgeons of England, late Surgeon to the Liverpool Dental Hospital. London, John Bale, Sons & Danielsson, Ltd. Cloth, 5s. net.

This work (a second revised edition) consists, to a considerable extent, of an abridged "Tomes" with important theories, etc., of other authorities on this subject. The matter has been arranged simply and briefly, but in a manner that is wholly comprehensive.

The chapters on Mammalia, divided into (1) Prototheria, (2) Metatheria, (3) Eutheria, are of especial interest as showing the comparison between the teeth of mammalia and the human teeth.

The author hopes that the work will be useful "in simplifying the mass of matter dealing with the subject of Dental Anatomy, and also help in furnishing a foundation upon which to build future knowledge."

Readers of the first edition of this work requested that the second edition contain blank pages for the addition of their own annotations and drawings. This request has been complied with, and a number of blank pages have been interspersed throughout the book.

FESTSCHRIFT DES VEREINES OSTERREICHISCHER ZAHNARZTE.—This volume is published by the Association of Austrian dentists on the occasion of the celebration of its fiftieth anniversary.

Vienna, November, 1911.

The Association, on November 14, 1911, celebrated its fiftieth anniversary. Various circumstances made it appear advisable, that the Association, instead of having an extensive program replete with many scientific lectures, as was usual on such occasions, publish a volume of original articles which was to portray the constant endeavors of its members for the advancement of their profession. There is an introduction, written by the librarian, Dr. Siegfried Ornstein, giving a short history of the Association.

DR. SAFFORD G. PERRY DEAD

Dr. Safford G. Perry died of ptomaine poisoning at 6 A. M. December 21st.

He was to have been toastmaster at the banquet to Dr. W. Wallace Walker.

By Mrs. Perry's express wish the banquet to Dr. Walker will not be postponed.

SOCIETY AND OTHER NOTES

Officers of Societies are invited to make announcements here of meetings and other events of interest.

Illinois.

The next meeting of the Chicago Dental Society will be held January 22 and 23, 1912, and the meeting of the Institute of Dental Pedagogics will be held in Chicago, January 24, 25 and 26, 1912.—Fred W. Gethro, *Secretary.*

Indiana.

The next meeting of the Indiana State Board of Dental Examiners will be held in the Capitol, Indianapolis, beginning Monday, January 8th, and continuing four days. All applicants for registration in the State will be examined at this time.—F. R. Henshaw, Indianapolis, *Secretary.*

Kansas.

The 41st annual convention of the Kansas State Dental Association will be held in the city hall, at Salina, Kansas, April 23d-25th, 1912.—S. S. Noble, D.D.S., Wichita, Kansas, *Secretary.*

South Carolina.

The next regular meeting of the Piedmont District Dental Society will be held in Piedmont, S. C., March 26, 1912. Clinics will begin promptly at 9 A. M.—W. Busey Simmons, *Secretary.*

South Dakota.

The South Dakota State Board of Dental Examiners will hold its next meeting at Sioux Falls, S. Dak., January 9th, 1912, at 1:30 P. M., and continuing three days. For further information, blanks, etc., address Aris L. Revell, D.D.S., Lead, So. Dakota, *Secretary.*

The thirteenth annual meeting of the South Dakota Dental Society will be held at Sioux Falls, May 14-15. Adoption of a new constitution and bylaws will take place at this meeting.—J. D. Donahue, D.D.S., Sioux Falls, *Secretary.*

NOTICE

G. V. BLACK DENTAL CLUB

It is with regret that the G. V. Black Dental Club of St. Paul, Minn., announces that it will be unable to hold its annual clinic in February, 1912. Illness of some of the members and of others whom we expected to help us make it necessary for us to take this action.

R. B. Wilson, 206-8 Lowry Bldg., St. Paul, Minn., *Secretary.*

ALUMNI ASSOCIATION, DENTAL DEPARTMENT, MARQUETTE UNIVERSITY

The sixth annual clinic and Manufacturers and Dealers' Exhibit will be held January 30, 31, February 1st, 1912, at the Milwaukee Auditorium, Milwaukee, Wisconsin. All ethical members of the profession are cordially invited to attend.

W. F. STRAUB, D.D.S., *Secretary.*

NEW JERSEY STATE DENTAL SOCIETY

On Friday, November 10th, 1911, the Executive Committee of the Society met in session and appointed the following members on Committees to act for the Annual Meeting in July, 1912:

ESSAY COMMITTEE—Wentworth Holmes, D.D.S., Chairman, Newark; David C. Baker, D.D.S., East Orange; C. S. Stockton, D.D.S., Newark; Raymonde Adair Albray, D.D.S., Newark; Frank G. Gregory, D.D.S., Newark; Franklin P. Luckey, D.D.S., Paterson.

EXHIBIT COMMITTEE—Moore Stevens, D.D.S., Atlantic City, Chairman; Robert Roessler, D.D.S., Hoboken; George Emery Adams, D.D.S., South Orange; Julius C. Feiner, D.D.S., Newark; Dr. Harry Mayer, Newark; W. L. Fish, D.D.S., Newark; Walter F. Farr, D.D.S., Hackensack.

CLINIC COMMITTEE—M. R. Brinkman, D.D.S., Hackensack, Chairman; S. C. C. Watkins, D.D.S., Montclair; Newton A. Bornstein, D.D.S., Newark; T. Starr, Dunning, D.D.S., Paterson; Frank L. Hindle, D.D.S., New Brunswick; C. A. Coppinger, D.D.S., Jersey City.

COMMITTEE ON AFFILIATION WITH THE NATIONAL DENTAL ASSOCIATION—Paul F. Beam, D.D.S., Neteong, Chairman; W. L. Fish, D.D.S., Newark; Stephen J. Barrett, D.D.S., Morristown; John B. Keller, D.D.S., Paterson.

The permanent Committees being all filled no change was made.

It was ordered that the Committees be instructed to proceed with their work at once. On motion of Dr. Holmes a committee consisting of the President, Drs. W. W. Hawke, Charles A. Meeker and Wentworth Holmes were ordered to visit Asbury Park and make contracts for the next meeting if the conditions were deemed satisfactory.

The following resolution was passed:

It is the sense of the Executive Committee that a special meeting of the Society should be held during the month of February to act on applications for membership presented at the annual meeting at Asbury Park, July, 1911, and other business that may come before the society. The date and city to be selected later.

CHARLES E. MEEKER, D.D.S., *Secretary.*

H. S. SUTPHEN, D.D.S., *Assistant Secretary.*

PATENTS

996113. Device for the removal of artificial post tooth crowns, William H. Mosely, Toronto, Ontario, Canada.

996921. Artificial tooth crown, Hart J. Goslee, Chicago, Ill.

996818. Device for tooth restoration, Frederick S. Waden, New York, N. Y.

997402. Toothbrush holder, John A. McGrath, Hancock, Mich.

997472. Artificial tooth cusp, Thomas Steele, Columbus, Ohio.

997937. Barber chair, Andrew L. Undeland, Omaha, Neb.

997965. Revolving cabinet, Leon H. Cobb, Brockton, Mass.